

SYLVA FLORIFERA:

THE

Shrubbery

HISTORICALLY AND BOTANICALLY TREATED;

WITH

OBSERVATIONS ON THE FORMATION OF

ORNAMENTAL PLANTATIONS,

AND

PICTURESQUE SCENERY.

BY HENRY PHILLIPS, F.H.S.

AUTHOR OF POMARIUM BRITANNICUM,
AND HISTORY OF CULTIVATED VEGETABLES.

Sylva nemus non alta facit: tegit arbutus herbam:

Rosmaria et lauri, nigraque myrtus olent.

Nec dense foliis buxi, fragilesque myrica,

Nec tenues cythra, cultaque pinus abest

OVID. *Ars Am.*

IN TWO VOLUMES.

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TO

MRS. HENRY PHILLIPS.

THE dedication of a work is the highest mark of respect that an author has the power of bestowing on an individual. He, therefore, naturally turns towards those, where his reverence, esteem, and affections are fixed.

And as it is now about a quarter of a century, since we have journeyed together over roads, sometimes sprinkled with flowers, and often strewn with thorns, the latter of which you have so invariably passed with fortitude and cheerfulness, as to set me an example of patience and perseverance: Hence, I flatter myself, you will receive with pleasure my labours in the *Sylva Florifera*; as it will prove my endeavours to dissipate the grief

that has so heavily befallen us since the commencement of this work, which was intended for your amiable and accomplished pupil; the loss of whom has fixed the cypress too firmly in our bosoms ever to be entirely eradicated: but as the study of vegetable nature is one of the best cordials for sorrow, accept, dear madam, the nectar its flowers offer, which has proved so great a balm to

Your devoted and affectionate Husband,

HENRY PHILLIPS

*Redford Square,
Brighton.*

PREFACE

THE Planter of the *Shrubbery* has endeavoured to dispose his trees and form his groves in a manner that may render his walks agreeable to every age and class, that may be disposed to seek information or amusement among the various plants of the *Sylva Florifera*. Should his efforts fail of success, he will at least enjoy the consciousness of having attempted to please all the admirers of Nature's works, by studying to render every common an interesting pleasure ground, and every hedge a pleasing plantation, by the information he has endeavoured to collect respecting the plants that flourish in them.

The author has also tried to make his book an agreeable companion to the traveller, who, as he passes through woods and lanes, may never feel himself solitary, but have his

way enlivened by vegetable history and botanical beauties. These by their connection with anecdote, and their poetical celebrity, may agreeably beguile his time as he journeys by the humble bushes of the road, or the proud natives of the forest.

To those who tread the flowery paths of ornamental gardens, the writer would wish the secrets of each blossom to be fully expanded, that the wisdom of the Creator may always shine conspicuous in their walks. Thus also, the plants themselves may invite the youth and the fair to the study of botany, by exhibiting the beauty and simplicity of that science.

For the information of those who are forming landscape plantations, the author has assigned to each tree and shrub its proper station, and noticed the tints of its natural robe, with observations intended to assist the planter in effecting a harmony of colouring and an undulating appearance in the grove.

— — Non Chaonis abfuit arbor,
 Non nēmus Heliadum, non frondibus esculus altis,
 Nec tiliæ molles, nec fagus, et innuba laurus,
 Et coryli fragiles, et fraxinus utilis hastis,
 Enodiſque abies, curvataque glandibus ilex,
 Et Platanus genialis, acerque coloribus impar,
 Amnicolæque ſimul ſalices, et aquatica lotos,
 Perpetuūque virens buxus, tenuesque myricæ,
 Et bicolor myrtus, et baccis cærulea tinūs;
 Vos quoque flexipedes hederæ veniſtis, et uva
 Pampineæ vites, et amictæ vitibus ulmi:
 Ornique, et piccæ, pomoque onerata rubenti
 Arbutus, et lentæ victoris præmia palmæ:
 Et ſuccincta comas, hirsutaque vertice pinus
 Grata Deūm matri —————

OVID. Metamorph.

—

“ Much can we praise the trees so straight and hy,
 The sayling pine; the cedar proud and tall;
 The vine-propt elme; the poplar never dry;
 The builder oake, sole king of forrests all;
 The aspine, good for staves; the cypresse funeral;
 The laurell, meed of mightie conquerours
 And poets sage; the firre that weepeth still;
 The eugh, obedient to the bender's will;
 The birch for shaftes; the sallow for the mill;
 The mirrhe sweete-bleeding in the bitter wound;
 The warlike beech; the ash for nothing ill;
 The fruitful olive; and the platane sound;
 The carver holme; the maple, seldom inward sound.”

SPENCER'S *Færic Queene*, Book I. Canto 1.

INTRODUCTION.

“ And let us to our fresh employments rise
Among the groves, the fountains, and the flowers,
That open now their choicest bosomed smells,
Reserved from night and kept for thee in store.”

• MILTON.

THE shrubbery is a style of pleasure-garden which seems to owe its creation to the idea that our sublime poet formed of Eden. It originated in England, and is as peculiar to the British nation as landscape-planting. Whilst other arts have been derived from ancient or borrowed from modern inventions, this has indisputably sprung from the genius of our soil, and is perhaps one of the most delightful, as well as most beneficial, of all that claim the name of elegant. .

• Ornamental plantations are now so universally spread over the face of this country, that our island may be compared to a vase

emerging from the ocean, into which the Syriacs of every region have set their favourite plants, and the Flora of every climate poured her choicest gifts, for the embellishment of the spot round which Neptune throws his fostering arms. Our ambition leads us to hope that we may add pleasure to the pleasure-ground, by pointing out the beauties of the shrubbery, which must render vegetation an object of admiration and veneration to all classes. We wish to attract attention to the peculiar pleasing properties of each plant by the remarks of the ingenious, the anecdotes of the ancients, the harmony of the poets, the observations of the physicians, and the reflections of the moralists of all ages. Morality, however, of a gloomy cast will be avoided; for our wish is to give the work, like the subject, a smiling aspect.

Though flowering shrubs seem to contribute nothing to pottage, and but little to medicine in its present refined state, yet they add greatly to our pleasure, and considerably to our health. They win us to good humour by their fragrance and cheerful appearance, and produce a serenity of mind by the calm reflections they present to it; thus assisting to relieve the maladies of the

soul, as drugs mitigate the grosser and more perceptible sufferings of the body.

“ The spleen is seldom felt where Flora reigns,
 The low’ring eye, the petulance, the frown,
 And sullen sadness, that o’ershade, distort,
 And mar the face of beauty, when no cause
 For such immeasurable woe appears :
 These Flora banishes, and gives the fair
 Sweet smiles and bloom less transient than her own.”
 COWPER.

We shall notice the allegorical allusions which the eastern nations are accustomed to make by means of flowers, and the fables of the ancient poets and mythologists respecting plants. Thus, pleasing ideas may be connected with pleasing objects, and agreeable images convey lively but moral sentiments to the mind, adding to the charms of the country without recourse to romance and useless fiction. These accustom the mind to such violent sensations, that at last it is obliged to resort to an excess of feeling, either of mirth or grief, to prevent that dreaded fashionable lethargy of spirit—*ennui*. Such a habit in the end injures health; and consequently shortens life, as much as a calm but cheerful state of mind assists in the prolongation and enjoyment of both : —

“ Come, then, ye blissful scenes, ye soft retreats,
 Where life flows pure, the heart more calmly beats.”
 DELILLE.

It would seem, that the more terrible a sight, and the more violent an impression, the more agreeable to the greater portion of mankind, who run with avidity after objects of horror, whilst they pass unnoticed those which produce gentle and agreeable sensations, and would to all appearance rather tremble at the awful thunderbolt of Jupiter, than calmly admire the bounteous horn of plenty. It has been observed, that the volcano near Naples attracts more travellers to the city than the delicious gardens which adorn the shores of that region. The plains of Greece, overspread with ruins, would entice many to undertake a voyage to a distant country, who would feel but little inclined to travel over their native soil to view its richly cultivated lawns; and there is no doubt, but that formerly, where one person went to Egypt to be a witness of Nature's bounty to that nation, five hundred became travellers to behold the Pyramids. A temple after it's fall, excites more eager curiosity than it did during its construction; and many who will not cross their thresholds to look at a beautiful calm in Nature, will rush to get a sight of a storm and shipwreck in a play-house. This love of the terrific is not, as has been asserted by foreigners, peculiar to the

English nation : it is prevalent every where. The author observed an instance of it when in Paris, in the summer of 1822. Wishing to visit the celebrated garden of M. Bourseau, which is unequalled for the beauty of its plants by any city-garden in Europe, he received in answer to all enquiries for direction to the spot, the usual careless but short and decisive, *Je ne le connois pas, Monsieur* ; but on asking the way to *La Mort*, every turn and alley were readily pointed out with all the bustle and officiousness of French politeness.

In this history of flowering trees and shrubs there is nothing terrible to present to the reader ; but every endeavour has been used to

“ Shew Nature’s form in smiling beauty drest,
And call mankind to view her and be blest.”

DEMLLE.

It seems hardly possible for any mind to be so debased as to be insensible to the effects of Nature, whose vegetable charms become more endeared to us as our age and reflection increase. A more delightful cabinet of natural history can scarcely be formed, than the shrubbery affords, even when unadorned by exotic beauties. It offers matter for contemplation of the most agreeable kind, which varies still as seasons

revolve ; and as every tree and shrub has it's peculiar inhabitants, we have at the same time a collection of animal and vegetable wonders, that are sufficient to occupy all the leisure which our economical duties allow us. As years increase, a taste for most pleasures in general diminishes. Those of the court become fatiguing ; the charms of the table appear to lessen ; and as passion subsides and love languishes, the gay ball and splendid opera lose their delights ; but the fondness for a garden increases, and is almost the only pleasure that does increase. Let us not, then, neglect to cultivate a taste for what will form the delight and amusement of the latter period of life. Every tree we plant adds to the entertainment we prepare for future years, for ourselves, our friends, and successors.

Should particular times and circumstances require a retrenchment to be made in domestic expenses, it should not begin with the garden. This once neglected or laid aside, cannot soon or with small cost be re-established. There are other more expensive and less profitable indulgences, which may be lessened without injury ; nay, perhaps, with benefit to an establishment. By giving one entertainment less each season in London,

more might be saved than by ruining a whole pleasure-ground, — the only means of subsistence to a few poor labourers, whose consequent discharge exposes them to want, and all the evils that accompany it.

The introduction of a useful or ornamental plant into our island is justly considered as one of the most important services that a person can render his country; for it is impossible to calculate on the benefits that may be derived through his means, when the qualities of the vegetable are ascertained and it's virtues known. Even what is introduced and planted merely from curiosity or ornament seems to unite us to the nations from whence it comes. It bestows on us a share of the blessings of other climates, and affords us a portion of the smiles of a more genial sun. When, therefore, we dwell on the beauty of exotic trees and shrubs, we wish to be understood as expressing our gratitude to those who have enriched our land with additional charms, and more fully displayed Nature to our eyes, and not as disregarding the plants that are indigenous to our soil. We are aware that many an Englishman has sighed under the shade of the banana, for a sight of his native banks, where the primrose sparkles through the hazel-hedge, and

the violet preps so modestly. The plants of our country recall the idea of it in the most forcible manner, wherever we meet them. They are often the first objects that attract the attention of those who have been long absent from their native fields, and who on their return pour out the genuine effusions of joy on beholding the village-elm, the well-known oak, or the unchanged yew, whose antiquity is equal to that of the church it shades. We are told of a young Indian, (Pontaveri from Otaheite,) who, in the midst of the splendor of Paris, regretting the simple beauty of his native island, sprang forward at the unexpected sight of a banana tree in the Jardin des Plantes, embraced it, while his eyes were bathed in tears, and exclaiming with a voice of joy, "Ah! tree of my country!" seemed, by a delightful illusion of sensibility, to imagine himself for a moment transported to the land which gave him birth.

We seem as it were for an instant to go back to the delights of infancy, when, on each succeeding spring, we visit the meadows covered with cowslips, which afforded us so many happy hours in childhood, as we formed balls of their blossoms. Then the playful girl, bedecked with wreaths and necklaces of daisies, led her little swain in chains formed of the

milky flower-stalks of the dandelion; but who at the sight of a butterfly burst the brittle bonds and scampered away, to return, perhaps, a few years after, sighing and entangled in fetters not so visible, but more binding.

There is no part of Nature's works more interesting than flowers. They seem intended for the embellishment of our fair, and for the ornament of the spot where they tread. Their sweet perfumes have such influence over all our sensations, that in the midst of flowering shrubs the most acute grief generally gives way to the sweetest melancholy. When our home and domestic companions are encompassed by the shrubbery, our situation then approaches nearest to a terrestrial paradise. Is it not, then,

“ Strange, there should be found,
 Who, self-imprisoned in their proud saloons,
 Renounce the odours of the open field,
 For the unscented fictions of the loom ;
 Who, satisfied with only pencilled scenes,
 Prefer, to the performance of a God,
 Th’ inferior wonders of an artist’s hand ?
 Lovely, indeed, the mimic works of art ;
 But Nature’s works far lovelier.”

COWPER.

The shrubbery is to a rational mind a source of inexhaustible delight and instruction, where each season brings new joy, and every morning a fresh harvest of delightful sweets. Sub-

jects for new thoughts and contemplations present themselves to our view, and even the most dreary months still supply causes of admiration, and discover a world full of wonders; for

“E’en Winter oft has seen it gay,
 With fretted frost-work spangled o’er,
 While pendants drooped from every spray,
 And crimson budlets told, once more,
 That Spring would all its charms restore.”

It is not to old age alone, that the garden offers its placid delights. Every stage of life, from the cradle to the grave, is attracted by it’s charms. The infant is ready to spring from it’s nurse’s arms, allured by the gay colours which flowers exhibit. They form the most innocent toy of childhood, and the cultivation of them is generally it’s first labour, whilst their presentation often explains the passion of youth. The happy belle loves to entwine them in her locks, and the fond parents delight to see their child mimic their beauties with the pencil :

“The flowers which grace their native beds,
 Awhile put forth their blushing heads;
 But, e’er the close of parting day,
 They wither, shrink, and die away;
 But these, which mimic skill hath made,
 Nor scorched by suns, nor killed by shade,
 Shall blush with less inconstant hue,
 Which art at pleasure can renew.”

The representation of flowers is the proper style of drawing for the softer sex. . In this attempt they will succeed, and, by this study will afford us a delight which they cannot do, when, “ o’erstepping the modesty of nature,” and the limits of their proper employments, they present us with specimens of their proficiency in the science of anatomy. A pursuit like this is often too bold, and the subjects sometimes too masculine, to suit the feelings of those who can never be admired for acting and feeling like men. But flowers are the peculiar province of the fair, and the nearer their imitation approaches to nature, the more it delight us; which paintings of murders, massacres, deaths, and agony, certainly cannot. The beauty and grace that may be displayed in grouping flowers, united with the gaiety of their colours and the harmony of their tints, are objects well worthy the attention of those who were born to render life delightful. The neatness, nicety, and patience required in finishing flower-pieces, seem to demand the delicate hand of a female artist.

“ Oui, beaux arts, oui, la femme, employant vos secrets,
Même sans être vue, ajoute à vos attraits.
Des fleurs par Valayer sur la toile jetées,
On est prêt à cueillir les tiges imitées.”

LEGOUVÉ.

We have seen many delightful pieces of fruit and flower sketches by ladies, but do not recollect instances where they have completely succeeded in the delineation of the human figure; and have known many become disgusted by a vain attempt, when they might have fully succeeded, and been well amused, had they commenced that branch of the graphic art which so peculiarly suits them. We are aware that our opinion may be objected to by the generality of drawing masters; but we write as a parent for parents, and can feel for those whose time has been vainly wasted in endeavouring to follow, with unequal steps, some of the boldest designs of man.

“ But softer tasks divide Florella’s hours ;
 To watch the buds just opening on the day ;
 With welcome shade to screen the languid flower-
 That sicken in the Summer’s parching ray.
 Oft will she stop amidst her evening walk,
 With tender hand each bruised plant to rear,
 To bind the drooping ivy’s broken stalk,
 And nurse the blossoms of the infant year.”

BARBAULD.

The description, by Moses, of the garden of Eden, the first abode of first created man, formed the outlines which Milton has so splendidly enriched with all the imagery of poetry. From this have been copied the plantation, the park, and shrubbery, so justly the pride of the nation, and so properly the

abode of its beauty. The Greeks devoted their terrestrial groves, as well as celestial gardens, to the gods; but the Mahometans reserve their flowery lawns and umbrageous bowers for scenes of future bliss to mortal believers. We, however, more prudent, should wish to collect all such blessings, which bounteous Nature has scattered over the globe, and in this present life form a modern garden, worthy of the Hesperides, and deserving of, though not requiring, a dragon to guard it.

“ ——— Much I love
 To see the fair one bind the straggling pink,
 Cheer the sweet rose, the lupin, and the stock,
 And lend a staff to the still gadding pea.
 Ye fair, it well becomes you. Better thus
 Cheat time away than at the crowded rout,
 Rustling in silk, in a small room close pent,
 And heated e'en to fusion: made to breathe
 A rank, contagious air, and fret at whist,
 Or sit aside to sneer and whisper scandal.”

Village Curate.

Some of the pleasure gardens of antiquity were created for, and devoted to, the pleasure of the softer sex. Solomon has celebrated those of Jerusalem in song, and the extraordinary gardens of Babylon appear to have been formed by Nebuchadnezzar for his Median queen, who, we are told, could not become reconciled to the flat and naked appearance of the province of Babylon; but

frequently regretted each rising hill, and scattered forest which she had formerly delighted in, with all the charms they had presented to her youthful imagination. The king, to gratify his consort, within the precincts of the city raised terraces and planted woods, in imitation of those that diversified the face of his queen's native country. Thus originated those gardens, which, for their singularity and comparative extent, were considered one of the wonders of the world. Their base covered four acres of land, and the height of them was so considerable, that they resembled a pyramidal mountain covered by a forest. The upper area, which was about thirty feet square, was about three hundred feet distant from the river Euphrates, that washed the base of the stupendous superstructure.

This towering pleasure-ground overlooked the whole city and surrounding country, as far as the eye could reach. Each terrace was covered with earth and planted with trees, so as to form a series of ascending groves ; and every platform supported rural seats, fountains, and sumptuous banquetting rooms, on which all the splendör and luxury of eastern magnificence were lavished.

This edifice was constructed by immense stone beams laid on pillars of stone, the first

flat being a square of about four hundred feet each way; these flats or stories lessening in surface as they increased in height. The stones were first covered with reeds cemented together by bitumen. On this covering was laid a double row of bricks united by cement, which were then covered also by sheets of lead, in order to prevent the moisture from penetrating downwards; and these sheets lastly sustained a depth of earth sufficient for the plantation of trees and shrubs. We are told that this elevated shrubbery was watered by fountains, the water of which we presume to have been conveyed into it by manual labour, as skill in hydraulics appears to be an acquirement of later times; and perhaps the ancient Egyptians, from their peculiar situation and circumstances, were the only people who attended at that period to the science.

We have noticed these gardens of Babylon, to show that pleasure-grounds have existed from the earliest ages in civilized countries. As the arts have flourished or been neglected, so have gardens flourished or decayed.

The Romans would naturally attach to their villas in this country a similar style of garden to that which they had been accustomed to in Italy. But this would be lost in baronial times, when nothing was secure outside the

castle walls. However, gardens of considerable extent were joined to the convents and monasteries of England; and we find that the cultivation of flowers and shrubs was attended to by most of the religious recluses of those establishments, as well as that of fruits, pot-herbs, and medicinal plants.

The citizens of London had gardens to their villas as early as the time of Henry II., which Fitz-Stephen tells us were “large, beautiful, and planted with trees.” In Cerceau’s *Architecture*, which appeared in the reign of Henry III., every ground-plot was laid out with plans of labyrinths and parterres.

The royal gardens of Nonsuch in Surrey, were formed in the time of Henry VIII. The privy gardens of that palace were planted with flowering shrubs and fruit-trees, and ornamented with basins of marble, fountains, and pyramids. The gardens of Hampton-Court were also planted about the same period, by Cardinal Wolsey; and from that time to the present, the taste for ornamental trees and shrubs has continued to increase.

Charles II. returned from the Continent with a taste completely French; and Evelyn also, from his travels through France and

Italy, during the Commonwealth, imbibed similar ideas. Thus our plantations at that time consisted entirely of long, dull avenues; and our pleasure-gardens of clipped hedges, walks laid out upon geometrical principles, and ever-green trees shorn into fanciful and ridiculous figures. Le Notre, who planned the celebrated gardens of Versailles, came over at this time to England, by desire of Charles, to plant the parks of Greenwich and St. James's.

Early in the eighteenth century, the formal and heavy style of gardening which had for some time prevailed, was changed by the united efforts of the English poets and painters of the day. By their pure taste and united efforts, they gave birth to that classical style of planting which has since been so much admired and imitated throughout the most refined parts of Europe.

Whilst Addison was forming a rural garden at his retirement at Bilton near Rugby, Pope was employed in laying out a picturesque plantation at Twickenham. At the same time, with their pens they engaged in open war against the right angles and disfiguring shears of the gardeners of their day, against whom they levelled some of the keenest

shafts of their ridicule. These geniuses were seconded by Kent, who, as a painter and architect, was admirably adapted to embody their imaginations. In his capacity of landscape planter, he laid out the grounds of Claremont and Esher, about the year 1730; and as he painted the hall at Stowe, it is probable that he assisted Lord Cobham in the grouping of his plantations also, which had been commenced on the modern plan about the time that Pope was occupied in forming his gardens at Twickenham. Kent was followed in succession by Wright, Brown, Holland, and Repton, who brings us down to the present day.

As this work will include the history of the trees that grace the park, as well as the shrubs that ornament the lawn, we shall proceed to make some brief remarks as to the antiquity of these enclosures. The Persians of old had parks, called by the Greeks *paradeisoi*, which contained animals for the chase; and the Romans had similar enclosures, *habitationes ferarum*, or habitations for beasts of the chase. It is generally supposed, that the park of Blenheim is the site of grounds that were once used by the Romans for hunting. It is also conjectured to be the

same spot which formed the park of Henry I., who, we are told by H. Huntingdon, had a park at Woodstock.*

The word "park" is originally Celtic, and like the French word *parc*, signifies an enclosed spot for the confinement of animals. "No man can now," says Wood, "erect a park, without a licence under the broad seal; for the common law does not encourage matters of pleasure, which bring no profit to the Commonwealth. But there may be a park in reputation, erected without lawful warrant; and the owner of such park may bring his action against persons killing his deer." It is considered in law to be no longer a park when all the deer are destroyed, for a park must consist of vert, venison, and enclosure; and to pull down park-walls or pales, subjects the offender to the same punishment as killing deer.

It will be necessary now to make some observations on the formation and planting of

Chaucer, the father of English poets, thus notices a park in the time of Edward III.:—

" I found a little weie
Toward a parke, enclosed with a wall,
In compace rounde : and by a gate small,
Who so that would he frelie mighten gone
Into this parke, ywalled with grene stone."

shrubberies, though under each article we shall state what trees assimilate best in neighbourhood. The style of this kind of garden must depend so much on the extent, situation, and character of the ground, that it would be absurd to offer more than general remarks.

The plantation should be carefully made to suit the building it is to surround. As the villa and ornamented cottage form the largest portion at present of edifices that claim a pleasure-garden, we shall confine our observations to the grounds attached to these dwellings. As such houses are generally built on situations too flat to admit of much natural variety, the first study should be to find where and how we can break the level by throwing up elevations, so as to answer the double purpose of obscuring private walks, and screening other parts from the wind. But it requires considerable ingenuity to hinder these elevations from having the appearance of artificial ones, which would make them as ridiculous as a circular lake on a lawn. As the removal of earth is attended by the expense of labour only, this is one of the most advantageous manners of laying out money in the formation of a shrubbery, since five feet lowered in one part and raised above

will give a slope or bank about double that height. A considerable effect will thus be obtained; for in a flat country a small elevation gives a great command of prospect, and adds itself considerably to the beauty of a landscape, especially when planted with lofty growing trees, as larches and pines. An undulating appearance may be given to level ground, by judiciously planting the trees and shrubs.

The too general error of planting close to the dwelling-house should be avoided; for although such a plantation may have a pretty appearance in the infant state, a few years' growth will cause it to cast a gloom over the apartments, and keep off a free circulation of air. Besides, as plants give out noxious air in the evening, it should be more particularly guarded against in this moist atmosphere.

The training of trees to the walls of houses is also objectionable, as they cause damp, harbour insects, and collect leaves and other substances that become offensive by their putrefaction, whilst the view of the plants themselves cannot be enjoyed from the windows. However, all offices, out-houses, and unsightly buildings, may be covered with vines and ornamental climbers.

However small the plantation be, those abrupt terminations which mark the limits must not be permitted. The shrubbery should harmonize with the surrounding scenery, and appear to blend with it into one.

The plants which stand nearest the dwelling must be of the dwarf kind, and of the most beautiful sorts. The trees, also, should be selected so as to correspond with the style of building. The villa shows best when surrounded by light ornamental trees, such as the birch, the acacia, the sumach, the laburnum, and cypress; and a clump of poplars may sometimes be introduced, so as to break the line with good effect. The cottage may have more rustic trees; while to the castle belong the oak, the ash, and the pine. The mansion admits of all at their proper distance, and in suitable situations.

One of the most important things in planting is to attend particularly to the shades of green, especially where the view from the house or lawn catches the trees. Flowers, which Pliny calls the joys of the trees, continue but for a short period, in comparison to the duration of foliage; therefore, the picture should be formed by judiciously contrasting the greens. Even the effect of perspective

may be considerably increased by the proper arrangement of hues. Trees whose leaves are of a grey or bluish tint, when seen over or between shrubs of a yellow or bright green seem thrown into the distance. Trees with small and tremulous leaves should wave over or before those of broad or fixed foliage. The light and elegant acacia has a more beautiful effect when its branches float over the firm and dark holly or bay-tree. In some situations the bare trunk of trees may be shown in some, it should be concealed by evergreens and creepers. Vines, also, may be suffered to embrace it, and form natural festoons where the extent of ground will allow of wilderness scenery. In all situations nature may be assisted, but should never be deformed by clipping; for ingenuity ought to be employed to disguise art, not to expose it.

The beauty of plants cannot be displayed when they are too much crowded, as they are then drawn up into unnatural shapes. Therefore, the oftener open spaces can be admitted, the more will the shrubs exhibit themselves to advantage, and the more cheerful will be the walk; for it becomes insipid and gloomy when confined for any distance. The winds also claim our attention. Care must be taken

so to arrange the position of the trees, that only those gales which are most congenial to the growth of particular plants should be allowed access to them.

The undulating appearance of a plantation will be considerably assisted by a gradual progression from the lowest shrub to the highest tree, and again, from the highest to the lowest. But, as some shrubs will not flourish under certain trees, their respective situations demand consideration. These shrubs may indeed exist under such unfavourable circumstances, but their unhealthy appearance will never be pleasing. Where the shade of any tree is too powerful, for laurel or privet to thrive, ivy may be planted with advantage, if it be desirable to cover the ground with evergreen.

In proportion as the shrubbery or plantation recedes from the dwelling, it should become more rural in its character, more especially if the house be in the cottage style. Here climbers, and such plants as require the support of others, are to be introduced. The most delightful groups in a pleasure-ground are generally those where nature, freeing herself from the shackles of art, depends only on her own assistance for support. Her beauty is chiefly to be seen

there where new various creations combine spontaneously, and without restraint.

The means by which these plants raise themselves up, so as to offer their flowers to the sun, are as various as they are curious, and they seldom blossom whilst trailing on the ground. The ivy and bignonia ascend by the help of little fibres, which fix themselves to the bark of trees or crevices in walls so tightly, as to render their disengagement a difficult thing to be accomplished without injury to the trunk or building they are attached to. The honey-suckle, like the hop, twines itself spirally around the trunk or branches of trees, and often clasps them so closely, as to make an impression on the hardest timber. Others, as the vine and passion-flower, rear themselves by means of corkscrew tendrils, which hold so fast, that the strongest winds seldom disunite them from their support. Some plants climb by means of a hook in their leaf-stalk, or have a kind of vegetable hand given them, by which they are assisted in mounting, as the pea and several others.

To return from this digression. — The sombre, gloomy walk of yew, cypress, or holly, should lead to the spot from which there is the most beautiful prospect, or to the gay

parterre where Flora has diffused her flowery beauties ; as the contrast, particularly if sudden, adds greatly to the cheerfulness of the terminating view.

Bad taste is seldom more conspicuous than when we see trees or plants marshalled in regular order and at equal distances, like beaux and belles standing up for a quadrille or country dance. Where the situation will permit, four or six lilacs should be grouped in one place, and as many laburnums in another, so as to give effect in various parts by a mass of colour.

The guelder rose should appear as if escaping from the dark bosom of evergreens, and not a plant should be set in the ground without adding to the harmony of the whole. A shrubbery should be planted, as a court or stage dress is ornamented, for general effect, and not for particular and partial inspection. Boldness of design, which seems to be more the offspring of nature and chance than of art and study, should be attempted ; but though boldness is what the planter should aspire to, all harshness, or too great abruptness, must be avoided, by a judicious mixture of plants whose colours will blend easily into one another.

The most beautiful shrubs should occupy

the most conspicuous and prominent places. For instance, a projecting part of the plantation should be reserved for the purple rhododendron, the flaming azalea, and other bog plants. Here, it must be observed, that unless proper soil be provided for these American plants, the cost of the shrubs will be lost, as they will soon decay when not placed in earth congenial to their nature. With these shrubs may be planted the hardy kinds of heath, as the same soil suits both species. With respect to evergreens, considerable judgment is required, in order to relieve their uniform appearance during winter. This may be done, by skilfully arranging different kinds, and those with variegated leaves, or such as retain their brilliant berries during the cold months.

However, a well planted shrubbery depends not so much for its beauty on the expense or rarity of the plants it contains, as on the selection of trees and shrubs which succeed each other in blossoming throughout the year, or whose various-coloured fruits grace them for the longest duration of time. We shall, therefore, not dwell upon those plants alone that are the ornaments of the summer season; but also point out some that will contribute to the gaiety of the morning and evening of the

year; so that the gloom may be banished at all times as much as possible from the grove, and nature's repose shortened between the plaintive good-night of autumn, and the cheerful good-morrow of spring.

The hazel and filbert are amongst the number of those trees that blossom the first; and although their crimson female flowers, which appear about the middle of January, make but little show, yet they should have a place in the shrubbery to display their catkins, that hang with such peculiar grace from the branches, at a season when scarcely any other plant or shrub offers a flower, excepting the rosemary.

“ Sweet-scented flower! who art wont to bloom
On January's frost severe;
And o'er the wintry desert drear
To waft thy waste perfume!”

The furze bush, also, is one of the greatest enliveners of the shrubbery at this season, particularly when allowed to exhibit it's golden blossoms at the foot of some dark-foliaged evergreen. Among the trees of the back-ground, the wych elm, the alder, the willow, and the osier, flower in March. At the same period, the leafless branches of the almond are covered with blushing petals; whilst the sloe and plum are most con-

spicuously beautiful with snowy blossoms, which are enhanced by contrast, if made to rise from the midst of dwarf evergreens, and shaded by others of taller growth. In a later season, the fruit is no less acceptable, and scarcely less ornamental, when it

“ Hangs purpling, or displays an amber hue.”

In the early months, also, the mezereon, the dwarf almond, and the pyrus japonica, give life to the fore-ground, when planted in little groups of three or four of each together.

At this season of the year, too, much of the beauty of the shrubbery depends on covering the banks, and feet of trees and shrubs, with considerable patches of the earliest flowers. In February, —

“ The snowdrop, winter’s timid child,
Awakes to life, bedew’d with tears,
And flings around its fragrance mild;
And where no rival flow’rets bloom
Amidst the bare and chilling gloom,
A beauteous gem appears.”

This beautiful flower has for its contemporary the crocus, which is also very ornamental, when planted in such quantity as to cover a large space. When scattered singly, or arranged in formal bodies, its effect is

entirely lost; and, like a single candle in a cathedral, it seems but to cast an additional gloom over the scene. The banks should, therefore, be made to glow with the flaming petals of the yellow crocus, whilst other spots should shine with the silvery tints of the purple variety. Clumps of the winter hellebore, or aconite, should also be formed on a large scale, as their yellow cups, set, as it were, in green saucers, have a fine effect in February. The anemone hepatica is also as beautiful as hardy; and as there are varieties with red, blue, and white flowers, it is a plant that should be cultivated to a greater extent than is usual, as an embellishment to this season. The wild wood anemone, whose white and yellow flowers so enliven the earth at the same time, may be planted under the trees; and the primrose, that so sweetly “peeps beneath the thorn,” when sprinkled abundantly between the shrubs and trees, gives an additional pleasure to the eye. The story of Proserpine may be recalled to our minds, by the view of gay plantations of early daffodils, that shake their golden heads to the winds of February..

Whilst occupied in this gay assortment, let us not forget that —

“ There is a flower, a little flower,
 With silver crest and golden eye,
 That welcomes every changing hour,
 And weathers every sky ;

“ ’Tis Flora’s page : in every place,
 In every season, fresh and fair,
 It opens with perennial grace,
 And blossoms every where.

“ On waste and woodland, rock and plain, .
 It’s humble buds unheeded rise ;
 The rose has but a summer reign,
 The *daisy* never dies.”

MONTGOMERY.

Large patches of the common field daisy are very ornamental, when planted amongst shrubs ; and the double crimson, white, and variegated kinds, deserve a conspicuous situation for their beauty, as well as for their early flowering.

As the lawn forms a principal feature in every pleasure-ground, this should also have an undulating surface, where the extent of ground will admit of it ; and it must be a small space indeed that will not allow of a bank being thrown up. The form of this part should neither be too regular, nor of a studied irregularity. It should appear in different places to retire into the plantation, so as to give the idea of greater extent, especially when viewed from the windows of the villa.

Where the coach-road is carried through the lawn, (which, however, if possible, should be avoided,) it should be occasionally obscured by irregular clumps of shrubs, such as roses mixt with dwarf evergreens. The private walks must always be of breadth sufficient to admit three persons abreast, however small the grounds may be; for plants are sure to be injured where the walks are narrow. In extensive shrubberies, each walk should lead to some particular object; to the orchard, kitchen-garden, botanical borders, green-house, dairy, ice-house, mushroom-hut, aviary, poultry-yard, or stables. The intention of the plantation should seem to be, to conduct the walker in the most agreeable manner to each outlet and building of utility or pleasure.

Where a lawn is of sufficient extent for detached trees, the apple may be admitted with great effect, the blossom being amongst the most beautiful that open in spring. Such as produce a red fruit in autumn are more ornamental than most other trees.

To those who are so devoted to fashion, as not to venture to “treat their lungs with air” unmixed with smoke, till the crowds that swarmed at court have fixed their departure for rural scenes and a pure atmosphere, like

swallows and other birds of passage; to such, the gaiety of the autumnal shrubbery is of most importance. It now remains to say, how the last expiring glow of beauty may be thrown over the pleasure-ground.

In addition to the trees and shrubs, which will be noticed in this work as flowering the latest, aid should be borrowed from such autumnal flowers as continue gay until the approach of winter. The towering hollyhock, when half concealed and half seen through the shrubs and evergreens, is one of the boldest enliveners of the plantation at this season. This plant yields to none in beauty of form, majesty of carriage, or gaiety of colour; its hues proceed through all the tints of crimson, from the palest rose to the deepest purple; and from the purest white through all the shades of yellow, orange, and iron-brown. The tall sunflower should also figure in the back-ground; and the middle space may be allotted to the richly-varied dalea of the western world. The foreground is to be rendered splendid by large plots of the asters of China, the general tints of which, inclining to blue or purple, contrast well with the more gaudy colours of the African marigold, or the nasturtium of Peru, which latter, should be suffered to climb the

holly or other trees, exhibiting its flaming petals to enliven the closing year.

In young plantations, where the evergreens have not spread sufficiently to cover the surface, clumps of wall flowers are exceedingly ornamental, and their green, which is of the most agreeable tint, lasts through the winter. They often flower both late in the autumn and early in summer. The periwinkle is also an excellent running plant to cover the slopes and banks of the shrubbery, as its blue flowers are to be seen amidst its evergreen leaves, from March to the middle of November.

It must not be forgotten that England possesses advantages over every other part of the globe for ornamental gardening; first, in the fineness and beauty of its turf, which retains its verdure throughout the year without much labour or expense; whilst, on the continent, this is obtained only by the assistance or partially-concealed means of irrigation. The few lawns that are kept in any tolerably decent order abroad, are generally under the care of Scotch or English gardeners. The gravel of this country is also so superior to that of any other part of Europe for the formation of walks, that the royal gardens of Naples have their paths

covered with gravel, brought from the distance of Kensington. Perhaps, there is no one spot where the plants of the north and south thrive so well together as in the English shrubbery. Added to these advantages, the absence of ravenous beasts and venomous reptiles, are blessings that ought to make us

“ Vain of our beauteous isle, and justly vain,
For freedom here, and health, and plenty reign.”

The advantages to be derived from planting timber trees will be noticed in their proper place under their respective heads. Our observations here will therefore be confined to the recommending that great attention be paid to the nature of the soil before the plantation is formed ; so that the young trees may have the benefit of a soil congenial to their future growth. As it is the skilful distribution of trees over the grounds, more than their peculiar character, which adds dignity to the landscape, so it forms one of the most important parts of the planter's study, to discover where to place the rising grove in such a situation as to improve the view. In a flat country, the first care should be to give an additional appearance of height to spots already elevated, by planting upon

them the tallest trees, that the soil will suit. In parks and paddocks, the belt or long plantation, should generally be avoided, as well as that of the crescent shape, because they prevent a free circulation of air, and render the enclosed atmosphere unwholesome. Oblong, or circular plantations, on the contrary, afford the trees an opportunity of benefiting by the air; admitting, at the same time, a view of the landscapes which they partially intercept.

“ The fountain’s fall, the river’s flow,
 The woody vallies, warm and low ;
 The windy summit, wild and high,
 Roughly rushing on the sky !
 The pleasant seat, the ruin’d tower,
 The naked rock, the shady bower,
 The town and village, dome and farm ;
 Each give to each a double charm,
 As pearls upon an Ethiop’s arm. —

DYER.

The principal feature of the park should be grandeur, and the boldest points of the surrounding country should be made subservient to the scenery by that arrangement of the plantation which will give such prospects the greatest advantage. Yet should the park exhibit some signs of refinement, by the softening down of particular parts by means of varying tints, so as to give greater contrast to the natural scenery.

“ Here groves arranged in various order rise,
And bend their quiv’ring summits in the skies.
The regal oak, high o’er the circling shade,
Exalts the hoary honours of his head.
The spreading ash a differing green displays,
And the smooth asp in soothing whispers plays,
The fir that blooms in spring’s eternal prime,
The spiry poplar, and the stately lime.”

SYLVA FLORIFERA.

ACAÇIA. — RÖBINIA • PSEUDACACIA.

*Natural order, Papilionacææ, or Leguminösæ.
A genus of the Diadelphia Decandria class.*

“ Light-leaved acacias, and the shady plain,
And spreading cedar, grace the woodland reign.”

BARBAULD.

ALTHOUGH we are far from being amongst
the number,

“ Whose proud disgust and scorn
Detest those treasures which at home are born ;
Who feel no joy, though spreading to the air
His pompous trees their verdant branches rear,
Unless from Afric’s soil their rise they boast,
From India’s deserts, or Columbia’s coast.

* * * * *

• But if some foreign tree, of noble size, •
With boughs majestic should adorn the skies,
Our forest natives with attention meet,
And hospitable care the stranger greet ;
Pleas’d ’mongst themselves his future dwelling make,
Not for his scarceness, but his beauty’s sake :
If haply profit too should join with grace,
To civic honours they admit his race.”

DELILLE.

Of all the exotic trees with which we have adorned our native groves, this North American stands first. We have no tree that displays more elegant foliage than is formed by its pinnated leaves, which appear so judiciously scattered over the branches that not one obscures its fellow, and their feathery lightness is only surpassed by the pleasing emerald tints with which they are coloured; nor are its bunches of pendant papilionaceous blossoms less acceptable for succeeding the more gaudy laburnum, and thus lengthening the charms of spring. The sweet perfume with which they scent the surrounding air only makes us regret their short duration; but to these succeed pods of so rich an umber brown, that autumn seems to peep through the veil of spring, and repay us for the loss of its orange-flower odour; whilst the nightingale loves to confide her nest to this new inhabitant of our climate, whose long and strong thorns seem to insure her family a protection, and she descends to the lower branches to ravish our ears with her sweet melody.

“Nor rural sights alone, but rural sounds
 Exhilarate the spirits, and restore
 The tone of languid nature.” COWPER.

We cannot with indifference behold this tree
 which the uncivilized natives of America have

consecrated to the genius of chaste love. These proud children of the desert are not less susceptible of the pangs which Cupid occasions, than the more polished inhabitants of Europe; nor are they less delicate in expressing their sentiments, which, instead of flattering words, are told by a branch of acacia in blossom. It is natural to suppose that this seducing language is as well understood by the young savage of the forest as by the tutored coquette of the city.

The introduction of American plants into Europe made a change in the system of botany absolutely necessary; for that which had been arranged by Tournefort and others, was found impossible to be applied to the plants of the new world. This tree, when first introduced, was supposed to be a species of the acacia known in the ancient world, because its thorny branches and winged leaves bore resemblance to the Egyptian thorn, or binding bean-tree; which the Greeks called *Ακακία*, of *ακαζω*, to sharpen, from whence the Latin *acacia*. But by the system of Linnaeus we discover that it cannot be ranged in the same class or order as the true acacia.

It is therefore commonly called the false acacia, while, in America, it is named the

locust-tree. We have now collected thirteen different species of this tree, all of which bear the generic name of *Robinia*.

Europe owes this vegetable beauty to Monsieur Jean Robin, nurseryman to the king of France, and author of a "History of Plants," who first brought the seeds from Canada; and, in gratitude for the gift, botanists have given it the name of *Robinia*. † Soon after its introduction into France, the English gardeners received seeds from Virginia, from which many trees were raised. Parkinson observes in his Theatre of Plants, which was published in 1640, that "it was grown of an exceeding height, by Mr. Tradescant;" and Evelyn recommends it to the nation in his Sylva, which was presented to the Royal Society in 1662. In this work, he says, "The acacia deserves a place among our avenue trees, adorning our walks with their exotic leaves and sweet flowers; very hardy against the pinching winter; but not so proof against its blustering winds." This great man, who so eminently displayed his desire to embel-

* A name which most probably was given to it by some of the early missionaries, who would wish to create a belief that it was the same tree the fruit of which supported St. John when in the wilderness.

Gerard received the pasturtium seed from M. J. Robin.

fish and enrich his native country, by plantations, adds, "I would encourage all imaginable industry in such as travel foreign countries, and especially gentlemen who have concerns in our American plantations, to promote the culture of such plants and trees, especially timber, as may yet add to those we find already agreeable to our climate."

These observations appear to have met with little attention, as the tree seems to have been rare in 1720, when Bradley notices it as growing in the court before Russel House, Bloomsbury, and in the Old Palace-yard, Westminster. In both of these situations their roots have given place to flag-stones, brick and mortar; their trunks to lamp-posts, and their waving branches to clouds of coal smoke. Mortimer says, "a great number of them were formerly planted in St. James's Park, and that in consequence of some of their branches being broken by the wind, they were all cut down."

This graceful tree is to be found in every well-planted shrubbery, yet it meets the eye less frequently than could be wished by the admirers of beautiful scenery, while in France it not only ornaments the gardens, and shades the public promenades, but its winged leaves shine through their woods and forests, so as

to give an idea of it's being a native of the soil. There it adds utility to luxury, and profit to beauty, for the turner finds the wood both hard and firm, while the joiner uses it for durability, and the cabinet-maker for the beauty of it's yellow and brown veins; nor must we forget a singular quality in this tree, which is, that it burns well even on the day that it is felled; a property of no small importance to a country where wood continues to be the only fuel. This tree grows from fifty to seventy feet in height, and so rapidly when young, that it is not uncommon to see shoots of this tree six or eight feet long in one summer. In New England, we are told of a Robinia tree, of forty years old, that was in 1782 sixty feet high and four feet ten inches in girth, at three feet from the ground. This timber has been employed with success in Virginia for ship-building, and found to be far superior to American oak, elm, or ash, for that purpose; it is even said to be as durable as the best white oak, and esteemed preferable for axletrees of carriages, trenails for ships, &c. Most of the houses which were built at Boston in New England, on the first settling of the English, were constructed of this timber. The native Americans make their bows

of this wood, and point their arrows with one of its thorns. Its tap-root, when cleared of the bark, has an agreeable perfume.

We are told, in Martin's edition of Miller, that Sir George Saville had, in 1807, planted many thousands of these trees at Rufford; and we feel confident that they will ultimately benefit his estate, notwithstanding the character given them by most English writers, that their branches are subject to be broken by the winds in summer. We have seen them so shattered in situations injudiciously chosen, while on the banks of the Thames, and in other sheltered spots, we have remarked them of more considerable age and magnitude than even in France.

The *Acacia Robinia* seems particularly adapted to ornament the modern villa; its light and loose foliage, that pleasingly admits the light, seems to harmonize better with the trellis work of the viranda than any other flowering tree, while the grace of its bend, and the gaiety of its head, correspond with the nicety and cheerfulness of this style of building, which has of late years so greatly embellished our country. Nothing, perhaps, displays more conspicuously than this the liberty of the people, and the equity of the laws that protect the lone cottage, more securely than any ramparts

or moats could have protected our forefathers, who found no security but in their castles, or the walled towns, where their reliance was on their numbers. These towns were called *Villæ**, and from whence we have derived the name of villa for detached country dwellings; and as long as our liberties and laws remain unimpaired, so long will the acacia wave its banners in security over our peaceable villas.

In placing this tree in the shrubbery or plantation, a sheltered situation should be chosen. It is a beautiful tree, either to look through, or to look down upon, and it is equally ornamental when it feathers to the ground, or carries its plumage above evergreen shrubs, which its shade injures less than that of other trees, and it is certainly less hurtful by its drip than any tree we know of. This may be accounted for from a singularity in the nature of its pinnated leaves: they fold over and join their upper surfaces in bad weather, leaving the tree, as it were, stripped of half its foliage, while the rain is conducted by

* The Latin word *Civitas*, properly, is referred to the people and inhabitants who live under one, not only one law, but also under one and the selfsame magistrate and government. *Urbs*, *Villa*, and *Oppidum*, signify the place wherein those citizens live and assemble themselves. *Tate on the Antiquity, &c. of Cities, Boroughs, and Towns*, 1598.

the branches to the trunk, and from the trunk conveyed to the root. These winged leaves expand themselves again in fine weather to exhale oxygen gas, but at the approach of night they again close their leaves, as if to sleep, and are thought to give out carbonic acid from their under surface. An infant, who had observed this natural phenomenon from it's nursery window, observed, "it was not bedtime, for the acacia tree had not begun its prayers ;"

" Thus every object of creation,
Can furnish hints to contemplation ;
And from the most minute and mean,
A virtuous mind can morals glean."

GAY.

The Robinia or, false acacia, is not delicate as to soil, for it will grow in earth of every kind, but prospers best in such as is light and sandy. The finest trees are those raised from seed, which should be sown in light earth, about the end of March, and in about six weeks the young plants will appear; they may be transplanted the following year, for all trees that have a tap-root it is advisable to transplant young. This tree is also propagated by suckers and cuttings ; but these seldom prove so handsome as those raised from seed.

We do not learn that this tree has in any shape added to the catalogue of medicines. The *Acacia* of the shops was formerly made of the unripe pods of the true acacia tree; but of later years, the *Acacia Germanica*, which is made from unripe sloes, is preferred as an astringent medicine to the true acacia.

ROSE ACACIA. — ROBINIA HISPIDA.

THIS beautiful flowering shrub, which is deemed the emblem of elegance, did not cross the Atlantic until more than a century after Jean Robin had transplanted its relative into European soil. It is a native of Carolina, from whence it was brought in 1743, to embellish our shrubberies that have now

“ The world’s extremes within their branches join’d,
 To either hemisphere convey thy mind;
 Each plant you see presents a country new,
 And every thought affords a voyage too;
 Through them, thy thought, that wanders from its
 home,
 To distant climates shall in safety roam.”

DEJUILLE.

This offspring of the New World has been named rose acacia, from the colour, and not from the form of its flowers, which, like those of the common acacia, are formed like the blossoms of the pea. These botanists denominate *papilionacæi* from *papilio*, a butterfly, whose shape they are thought to resemble.

In its native soil, the rose acacia grows to the height of twenty feet, but with us it seldom exceeds from six to ten feet; and as its wood is exceedingly brittle, if it has not some support, the branches are often broken or slipped off by the wind ere it reaches that height.

“ Few self-supported flow’rs endure the wind
Uninjur’d, but expect th’ upholding aid
Of the smooth shaven prop, and, neatly tied,
Are wedded thus, like beauty to old age,
For int’rest sake, the living to the dead.”

· COWPER.

This plant should always be found in the fore ground of the shrubbery, where its brilliant foliage, suspended on branches that are clothed with hairs of a reddish brown, cannot fail to excite our admiration; and although it seldom, if ever, matures its seed in this country, it is by no means shy of flowering, which it does in the early part of June; and often treats us with a second dis-

play of its drooping blossoms in August and September, as if conscious that it had not performed its part to nature, which has ordained, that plants should “bring forth seed after their kind.” It is well known, that most plants will continue to give out blossoms, if their flowers are cut off before seed is formed ; which seems like the instinct of fowls, that continue to lay eggs in the nest that is plundered.

The rose acacia is propagated by grafting it on the common acacia ; therefore it thrives in any soil like the parent stock. Care should be taken to rub off all shoots that appear below the graft.

ARBOR VITÆ.—THUJA.

Natural order, Coniferae. A genus of the Monœcia Monadelphica class.

THE generic name of this tree is a corruption from *Θυα* of *Theophrastus*, or *thya* of *Pliny*, which were derived from the verb *thyō*, I perfume; as the *thya* of the ancients gave out an aromatic smoke when it was burnt. It is called *arbor vitæ*, or tree of life, because it keeps in full leaf winter and summer; and not in allusion to the tree of life mentioned in the book of Genesis.

The royal garden of Fontainebleau had the honour of giving nourishment to the first *arbor vitæ* that was planted in Europe, and which was sent from Canada as a present to Francis the First. It does not appear to have been cultivated in England during that monarch's contemporary; as it is unnoticed by Turner, who dedicated his "Herbal" to Queen Elizabeth, in the first year of her reign; but Gerard tells us, in his "History of

Plants," which was published in 1597, that it was then growing very plentifully in his garden at Hollorn, where it flowered about May, but it had not then ripened seed.

"The Thuja from China's fruitful lands,"

being of a brighter green and thicker of verdure, has nearly superseded the arbor vitæ of Canada in our plantations. The seeds of the Chinese arbor vitæ were first sent by some of the missionaries to Paris, where the quantities of these evergreens show how successfully they have been cultivated; but, we fear, these holy fathers have not been equally fortunate in propagating the seeds of Christianity in the land that gave them the tree of life.

Miller cultivated this species of the arbor vitæ, at Chelsea, in 1752; and it has now, from the hardiness of its nature, and the ease of its cultivation, spread itself, like the roses of China, over every part of our island. Surely this should induce us to naturalize, or, at all events, to make the trial of cultivating the tea-tree, which would, ere this, have covered our fields with its reviving leaves, had we bestowed half the attention on it that has been lavished on the asters and chrysanthemums of that country.

The arbor vitæ recommends itself to a place

in the shrubbery, not only by its perpetual greenness, but by the singularity of its flat spreading branches, and the minuteness of its leaves, that cover the young branches like the scales of fish. The flowers which appear in the spring, are produced from the side of the young branches, pretty near to the foot-stalk; the male flowers grow oblong catkins; and between these, the female flowers are collected in the form of cones. When the male flowers have shed their farina, they soon drop off; but the female flowers are succeeded by a cone of a knotted or cornered ovate shape, of a beautiful grey colour, which encloses seeds of an elliptic globular shape and of a pale hue.

The arbor vitæ is well adapted to screen private walks or low buildings, as it gives out branches near the ground; but it has a sombre appearance, unless associated with more cheerful foliage, or ornamented by some gay climbing plant, as the everlasting pea or the flaming nasturtium; but no flower contrasts so beautifully with this exotic evergreen as our native bindweed, whose white convolvuluses appear with peculiar grace when suspended from and enlivening the tree of life.

“ Each give to each a double charm,
As pearls upon an Æthiop’s arm.”

There are many other aspiring plants that might be more safely permitted to

“ — — — catch the neighbouring shrub
 • With clasping tendrils, and invert his branch,
 Else unadorn'd, with many a gay festoon
 And fragrant chaplet, recompensing well
 The strength they borrow with the grace they lend.”
 COWPER.

Although the arbor vitæ will thrive in a shaded situation, it never produces seed but where it enjoys a free circulation of air. We have observed it on the elevated part of Père-la-Chaise, the romantic burial-ground of Paris, accompanying almost every tomb, completely covered with its singularly shaped but beautiful coloured fruit. We could not learn, whether the French planted it as a substitute for the mournful cypress, or because they consider its wood imperishable; or whether the name *arbre de vie* has been the inducement. In a few years more, this burial-ground will become a mountain filled with dead bodies, and a forest composed of the trees of life.

The celebrated professor Kalm, in his travels into North America, observes, that these trees were very plentiful in Canada; but not much farther south than 42° 10' north latitude.

Mr. Bartram found a single tree in Virginia, near the Falls in the river James. Dr. Colden saw it in many places between New York and Albany, in about $41^{\circ} 30'$ north latitude. It grows naturally also in Siberia and the northern parts of China in nearly the same latitude; which is an additional instance to those we have remarked in the work on vegetables, that the natural plants of Europe, or a species of them, are generally to be found in the same latitudes of the New World, although their uses are frequently reversed, for the same plant which the husbandman labours to root out of the earth in one part of the globe, is sought after with avidity by the inhabitants of other countries. The nettle, which our peasants drive from their fields with blows and maledictions, is a crop which the Egyptians put up frequent and fervent prayers to be blessed with. Its seed affords them an oil, while the stem furnishes them with a thread, which they weave into excellent cloth. Thus, by investigation, we shall find, that there is not a plant,

“ From the proud woods, whose heads the sky assail,
To the low violet that loves the dale,”

but what has certain relations to the necessities of man, and which does not serve him somewhere for clothing, for shelter, for pleasure, for medicine, or at least for fuel. The arbor vitæ, which we have borrowed from the extremity of the east and of the west, as a mere ornament to our pleasure-grounds, forms an article of utility and profit to the inhabitants of its native soil.

Kalm says, that it is reckoned the most durable wood in Canada, where the French call it *cedre blanc*, and the English white cedar. All the posts which are driven into the ground, and the palisades round the forts in Canada, are of this wood. The planks in the houses are made of it; and the thin narrow pieces of wood which form both the ribs and the bottom of the bark boats, commonly made use of there, are taken from this wood, because it is pliant enough for the purpose when fresh, and likewise, because it is very light. The Thuja wood is reckoned one of the best for the use of lime-kilns. Its branches are used all over Canada for besoms, which leave their peculiar scent in all the houses where they are used.

Our plantations have not been more beautified by exotic shrubs, than our schools of medicine have been enriched by Indian

receipts. The poor *uncolleged* negro, looking to Nature for a salve for every wound, made many discoveries that would have escaped the notice of the best lettered and most laborious son of Æsculapius, whose humane profession has taught him to be emulous in collecting foreign remedies to ease our native maladies,—of the botanist who collects foreign trees to embellish our native groves.

The arbor vitæ affords the Indian a remedy for the cough and the intermitting fever, and a medicine for rheumatic pains, which the commandant of Fort St. Frederic, M. de Lusignan, said he could never sufficiently praise, and which is simply the fresh leaves pounded in a mortar, and mixed with lard or other grease. This is boiled together till it becomes a salve, which is spread on linen, and applied to the part where the pain is, to which it is said to give certain relief in a short time.

The oil is recommended against the gout, being rubbed on the part; for it acts like fire, by stimulating and opening. The leaves bruised with honey dissolve tumors.*

The balsam and oil of arbor vitæ were

* Boerh. Hist. Dale.

very much used during the time of the plague in Dresden.

In the culture of these trees, we observe the finest are always raised from seed, which should be sown in pots of light earth about the month of March, and placed in a sunny situation, with a south-east aspect. The pots should be covered with moss so as to keep the earth humid.

The seed throws up little hills of earth, out of which the plant rises. For the two or three first winters, the pots should be covered with fern or other litter to secure the plants from frost, and by the fourth year they will be ready to plant in the shrubbery. *

These trees are more easily raised by layers or cuttings. The latter should be planted in September, upon a shady border, and in a loam soil. They should be chosen from the shoots of the same year, with a small joint of the former year's wood at the bottom of each. These should be planted three or four inches deep, in proportion to their length, treading the ground close to them, to prevent the admission of air. If the following spring should prove dry, there should be a little mulch laid over the surface of the ground to

prevent its drying. These cuttings may be transplanted the next autumn. When they are propagated by layers, the young branches should be laid down in Autumn or March, which will put out roots by the following Autumn. *

Miller.

ALDER.—ALNUS.

*Natural order, Aménacææ. A genus of the
Monœcia Tetrandria class.*

THE classical reader will regard this tree with peculiar interest, as it will remind him of the lines in Virgil—

Tunc alnos primum fluvii cœnere cavatas.

“ Then first on seas the hollow’d alder swam.”

DRYDEN.

*Nec non et torrentem undam levis innatat alnus,
Missa Pado.*

Geor. 2.

“ And down the rapid Po light alders glide.”

Ovid also tells us,

“ Trees rfidely hollow’d did the waves sustain,
Ere ships in triumph plough’d the wat’ry plain.”

When the Author of Nature first clothed the earth with vegetables, every plant was adapted to its peculiar situation. There was nothing superfluous or idle, from the pine

that crowns the mountain, down to the violet
which perfumes the grove. All were links of
one harmonious chain:—

“ Nature, ~~enchanted~~ Nature, in whose form
And lineaments divine, I trace a hand
That errs not.”

• COWPER.

The alder and its relatives that love the
stream, follow the current through every part
of the globe: confining the rivers to their due
bounds, and correcting the vitiated air of
those situations by the peculiar qualities
allotted to aquatic trees, which absorb the
corrupted air more profusely than the natives
of drier situations. We cannot reflect on
this great wisdom of Providence in the scat-
tering of plants, without exclaiming with
Pope —

—— “ How wondrous are thy ways!
How far above our knowledge and our praise!”

In this country, the alder is seldom suffered
to attain its natural bulk, but in ancient times,
when men were less numerous and trees
more abundant, the dimensions of the alder
were sufficient to form their boats, which we
have already noticed from Virgil; and if we
except Noah's ark, we shall find, that the first
vessels we read of were made from these
trees. Their contiguity to rivers, and the im-

perishable nature of the wood when kept in the water, were doubtlessly their recommendations to the early navigators. As men dispersed themselves over Europe, so did they convey the nautical use of this tree; and it is singular, how little the pronunciation of its name has changed with the migrations of man. The oldest English writer we have consulted calls it Alder, from which it was changed to Aller, and again to Alder; the Scots call it *Eller*; the French *Aulne*; the Germans *Eller*, *Erlc*, or *Erlenbaum*; the Dutch *Els*, *Elzeboom*; the Danes *Ell*, *Elle*, *Elletræc*; the Swedes *Al*, *Ahl*; the Italians *Alno*, *Ontano*; the Spaniards *Aliso*, *Alamo*; the Portuguese *Alemo*; the Russians *Olcha*; the Polanders *Olsza*; and the Latins *Alnus* and *Alnos*, which is thought to be abridged from *alor amne*:—"I am nourished by the stream."

The alder does not possess those striking beauties, which attract our admiration to many other trees or shrubs; nor is it calculated to fill a space in those shrubberies whose narrow bounds are limited to the width of the dwelling, and whose length is terminated by the useful abode of the *horse and chaise*. The alder must terminate the largest shrubbery and most lengthened walk;

it should point out the river's approach, and direct the angler where to

“ Throw nice judging the delusive fly.”

Or it should mark the spot,

————— “ Where with the pool
Is mix'd the trembling stream, or where it boils
Around the stone, or from the hollow'd bank
Reverted plays in undulating flow.” THOMSON.

The highest pinnacle of the planter's perfection is to disguise art under the appearance of nature; which he can only do by attention to rural scenery, where we often meet with plants more happily grouped than in the studied views of the landscape gardener; yet we would say with Pomona's bard,

“ Attend my lays; nor hence disdain to learn,
How Nature's gifts may be improved by art.”

The round dark leaves of the alder may be associated with the long lanceolate and silver-tinted foliage of the *salix alba*, or white willow; and where the stream widens into a pool, the softer tints of the weeping willow may lend its aid, and “ Po's tall poplar” may be employed to break the line.

The alder is what botanists denominate an androgynous plant, that is, producing both male and female flowers separately, but on

the same tree. The catkins, or male blossoms, are formed about the middle of September, where they hang uninjured by tempestuous rains, and unseduced by flattering sun-beams, till their betrothed female flowers appear in March, when

“The happy trees
Commit their mutual wishes to the breeze.
The palm invites the palm to Hymen's vows;
Swung in the wind the poplars nod in love;
Alders to alders bend their longing boughs;
And, through the leaves, love whispers in the grove.”

The flowers of the alder have no gay tint to recommend them, but the botanist and the curious observer of Nature find pleasure and instruction in every bud that open

The ancients were well acquainted with the imperishable property of this timber, when used for piles or other works that were covered with swampy earth or water. Vitruvius, the celebrated Roman architect, tells us in the work which he dedicated to Augustus, that the morasses about Ravenna were piled with these trees, in order to lay the foundations for buildings. Evelyn informs us, that the alder was used under that famous bridge the Rialto, which passes over the grand canal at Venice.

In Flanders and Holland, the alder tree is

greatly cultivated for the purpose of piles; for in those moist and boggy situations; buildings could not be safely erected without the aid of this tree that loves such a soil. When this wood has lain long in bogs, it becomes black as ebony. Joseph Bauhimas pretends, that in process of time it turns to stone. — It is possible, that it may in some situations become petrified, where it meets with earth and water of a lapidescent quality.

The alder is one of the most proper and profitable trees that can be employed to keep up the embankments of rivers or canals; for whilst its roots and trunk are acting as a buttress against the power of the stream, they send out branches which may be cut for poles every fifth or sixth year, particularly if they be pruned of their superfluous shoots in the spring.

“ As alders in the spring, their boles extend,
And heave so fiercely, that the bark they rend.”

VIRGIL.

It is no small recommendation to these trees, that their branches do not injure the growth of grass, whilst their appearance adds more to the beauty of brook-lands than most other aquatic trees. The wood of the alder makes excellent charcoal; and it is valuable for pumps, pipes, sluices, and all works in-

tended to be constantly under water. It also serves for many useful purposes in domestic and rural economy, such as cart-wheels, troughs, handles of tools, &c.; whilst the good housewife knows its value in spinning-wheels, milk-vessels, bowls, trenchers, &c., and it supports her from the damp earth, in the shape of wooden heels, pattens, and clogs; nor is she unacquainted with a property in the leaves, with which she strews her chambers before sweeping, for when fresh they are covered with a glutinous liquor, that entangles fleas like birds in bird-lime. The whole tree is very astringent, and well-known to the country dyers. The bark is used by them, as well as by the tanner and leather-dresser, and the fisherman is not unacquainted with its utility for tanning his nets.

Those artisans, whose lives are spent in the Gobelins, to throw a semblance of nature into tapestry, borrow their shades for flesh colours from this tree, with the assistance of a little copperas. The young shoots dye yellow, but if cut in the spring, when full of sap, they dye a cinnamon colour. The fresh wood yields an umber tint; the catkins a tolerable good green; and the bark is employed as a basis for black, particularly in

dyeing cotton. The Laplanders chew the bark, and colour their leather garments red with their saliva. The bark and the fruit together yield a tolerably good ink. The roots and knots furnish the cabinet-maker with a beautiful veined wood.

Having already noticed from the architect of the ancients, that it was valuable to prop up houses, we will now see what use our ancestors made of it in propping up their constitutions. In *Lemery des Drogues*, we read that the bark and its fruit are cooling, and proper for inflammations of the throat, being used as a gargarism. Both Tragus and Dodonæus made use of the leaves of the alder as a cataplasm, to soften and resolve tumours. Dale tells us, that taken inwardly the leaves are excellent vulneraries. Most of the old medical writers sum up its various properties by stating, that the leaves put into the shoes of travellers, mitigate pain and lassitude. This last receipt we particularly recommend to those bulky subjects, who pass feverish days and restless nights, because

“ They never pass their brick-wall bounds,
To range the fields, and treat their lungs with air.”

It is well known that the finest alder trees are raised from seed; yet it is seldom, if ever,

practised in this country, because it is not the custom!

Let not thy servile care
Too close a copy of our fathers bear;
Give new resources to the rustic art,
Try other schemes, and other views impart."

The best time for planting truncheons of alder is in February, or the beginning of March: they should be sharpened at the end, and the ground loosened with an iron crow before they are thrust into it, to prevent the bark being torn off. They must be planted at least two feet deep. When the alder is cultivated by layers, the operation should be performed in October, and in twelve months it will be ready to transplant.*

Aiton enumerates five different species of alder, most of which afford several varieties.

Monsieur Noisette has lately introduced a new species of this tree, which has very large leaves, and which he names *maritima macrophyla*.

* His Grace the Duke of Devonshire planted 19,612 alders, between the years 1816 and 1819.

ARBUTUS, OR, STRAWBERRY TREE.—
ARBUTUS UNEDO.

*Natural order, Bicornæ. Ericcæ, Juss. A genus
of the Decandria Monogynia class.*

*“Pomoque onera a rubenti
Arbutus.”*

OVID.

“The arbutus laden with blushing fruit.”

————— “At a season
When the cheerless empire of the sky
To Capricorn the Centaur archer yields,
And fierce Aquarius stains the inverted year;
Hung o’er the farthest verge of heaven, the sun
Scarce spreads thro’ ether the dejected day;”

THIS beautiful shrub mingles its drooping alabaster flowers, and its pendent crimson berries, with its glossy dark foliage, thus offering all its beauties to enliven the evening of our year when most other trees have retired to rest, which must always ensure it a favourable situation in the shrubbery, where it will, as often as we see its unpalatable berries, remind us of the gratitude which we owe to the

horticulturist as well as the agriculturist, who has collected to one spot the fruits and grains that were scattered so widely over the globe, and who has by his art so much improved what he has collected, that we now reject as food the strawberry of the arbutus, which fed the earlier race of mankind.

The Greeks called this tree Κομαροί, and the fruit Μιμαικυλον; the Latins named the tree *arbutus*; but in Pliny's time, when Rome abounded in wine and oil, they called the fruit of this tree *unedo*, which was an abridgement of *unum edo*, meaning, you will eat but one. It has the name of strawberry-tree with us, because its berries so nearly resemble, in appearance, that delicious fruit. When it was first introduced from Ireland, it bore the name of Cain-apple. We conclude that this name was bestowed on it by superstition, whose terrible imagination alone was able to transform these beautiful berries into clots of Abel's blood.

We are not able to ascertain precisely at what period the arbutus was first cultivated in England. Dr. Turner says that he had not seen it in this country in 1568. Gerard also describes the tree in 1597, but he does not say that it was then planted in our gardens. Parkinson notices in 1640, that "it came to

us from Ireland." Evelyn observes, as late as the time of Charles the Second, that "the arbutus is too much neglected by us, making that a rarity which grows so common and naturally in Ireland." It is found growing spontaneously on rocky limestone situations, in the west of Ireland, particularly in the county of Kerry, near the lake of Killarney, where the peasants eat the fruit.

The arbutus is a native of the south of Europe, Greece, Palestine, and many other parts of Asia. It grows so plentifully about Magnesia, as to be the principal fuel used by the inhabitants. Belton says, it is common in Crete, and between Aleppo and Antioch. Wheeler observed it near Athens, and saw the fruit in the market at Smyrna. In Constantinople it is called *komaria*, which is nearly preserving the Greek name. A friend, who has resided there for some years past, informs me, that the fruit is commonly offered for sale in that capital, being threaded on a straw or grass, as our peasants' children string birds' eggs or wild strawberries.

Horace celebrates the shade of this tree —

*"Nunc viridi membra sub arbuto
Stratus."*

"Stretched under the green arbutus."

But Virgil describes its foliage as rather thin.

“*Muscosi fontes, et somno mollior herba,
Et quæ vos rarâ viridis tegit arbutus umbrâ,
Solstitium pecori, defendite.*” Ecl. vii.

“Ye mossy fountains, and grass softer than sleep,
And the arbutus which covers you with its thin shade,
Keep off the solstitial heat from my cattle.”

This prince of poets recommends the twigs
as a winter food for goats :

—— “*jubco frondentia capris
Arbuta sufficere.*”

“Supply your goats with the leafy arbutus.”

He also writes—

“*Arbutæ crates, et mystica vannus Jacchi.*”

“Wattles of the strawberry tree, and the mystic van
of Bacchus.”

If we lay aside the works which the ancients have written on vegetation, to read nature itself, we cannot be less delighted ; for there is not, says an elegant poet,

—— “a tree,
A plant, a leaf, a blossom, but contains
A folio volume. We may read, and read,
And read again, and still find something new,
Something to please, and something to instruct.”

It is on this account that we would wish to see the study of botany more generally cultivated, which gives, as it were, an additional eye to those who walk either amongst the native

beauties of the field; or the exotic charms of the shrubbery; for, however elegant, however admirable, however diversified, the structure of vegetables may be, it does not strike the eye of those who are ignorant of their parts enough to interest them, because they do not even know where to look, or the use of what they look at. They have no conception of that assemblage and chain of relations and combinations which overwhelm with their wonders the mind of the observer who has studied this part of the creation, and who would find more beauties in the little inflated flower of the arbutus, than the indolent observer can perceive in the gay amaryllis of Buenos Ayres, or than the indifferent spectator will see in the matchless elegance of the passiflora, whose stars so splendidly illuminate the Brazilian forests. The very formation of the arbutus flowers strikes the botanist with admiration. He there learns that nothing is too minute to show the wisdom of the universal Creator; he observes how carefully nature has adapted these winter blossoms to the season of their flowering. These little vegetable bottles, which house so securely the parts of fructification from the storm, cover also the embryo fruit with their crystal-like bell, which admits the necessary light, whilst

its indented margin excludes more air than is requisite, and its pendent position throws off the dews and keeps the anthers dry, that they may discharge their impregnating dust even in the rainy season of November. But lest we should dwell too long on the anatomy of plants for those who make it their trade to dissect poor authors whilst living, we will return to the natural history of the arbutus, which takes a whole year to mature its fruit, so that the red branch, from which the ruby balls are suspended, is garnished with the snowy corollas of the succeeding crop, and thus—

“with blossoms and with pendants shine,
And vernal honours to their autumn join;
Exceed their promise in the ripen'd store,
Yet in the rising blossom promise more.”

POPE.

The arbutus tree succeeds best in a moist soil, for when planted in dry ground it seldom produces much fruit; it is therefore recommended to place it in warm situations; and if the earth is not naturally moist, there should be plenty of loam and rotten neat's dung laid about its roots, and in dry springs it should be plentifully watered.

Miller says, “these plants are tolerably hardy, and are seldom hurt, except in extreme

hard winters, which many times kill the young and tender branches, but rarely destroy the roots; therefore, however dead they may appear after a hard winter, yet I would advise the letting them remain till the succeeding summer has sufficiently demonstrated what are living and what are dead; for the winters of 1728-9; and 1739-40, gave us great reason to believe most of the trees of this kind were destroyed; and many people were so hasty as to dig up or cut down many of their trees; whereas all those who had patience to let them remain, found that scarce one in five hundred failed to come out again the next summer, and many of them made handsome plants that year."

The arbutus trees may be propagated by layers, but they are principally raised from seed; and as they require to be kept in pots for several years before they are ready for the plantation, we must not think the nurseryman's charge exorbitant for demanding a higher price for this plant than for many others of a more delicate nature.

Monsieur Pirolle tells us in his *Bon Jardinier* of 1822, that the arbutus trees which are raised from English seed are found to be of a hardier nature and better enabled to endure the winter than those raised from the seed of

other countries. Mr. Boutcher observes, that as the seeds ripen at different times, they must not be gathered all at once.

Those fruits which are ripe may easily be known, by their turning of a deep brownish tawny colour, which is generally in the month of December; they retain their growing quality a very short time, and therefore the berries should be mixed with dry sand to preserve them until the time of sowing, which is about the middle of March, when the seed should be rubbed out and sowed with the sand in pots of rich loose mould, which should be plunged into an old bed of tanner's bark, that has lost its heat, and covered with glasses to keep out the frost. Mr. Boutcher says, if the quantity you intend to raise be large, prepare a moderate hot-bed of tanner's bark; lay on six inches deep of the finest rich loose mould, sow the seeds, and cover them not more than one-sixth of an inch deep. In five or six weeks the plants will appear. The second spring he recommends them to be removed into penny pots, which should be plunged into the hot-bed till August, hardening them gradually, by exposing them to the open air in moist calm weather.

They may then be placed in a warm spot under a hedge, till October; after that time

attention must be paid to cover them with mats in bad weather. The following spring, the surface mould should be taken out, and the pots again filled with rich earth, and removed to a shady border till autumn. In dry weather they must be watered every second or third evening; and placed for the winter under a hedge or wall, where they may have sun. M. Pirolle recommends a south aspect.

Having thus stood two seasons in the pots, they are to be shaken out cautiously, and the mouldy or musty roots cut off. They must then be plunged in water and earth for an hour, and afterwards placed in twopenny pots, where they may continue two or three years. The first season they should be kept under shade and shelter, and watered in dry weather; and every spring the earth must be taken away from the surface of the pots, and replaced by some which is fresh and rich.

It is recommended not to prune this tree at removal; this should therefore be done a year before or after the operation.

We meet with a variety of this tree in our shrubberies with double blossoms, and another with red flowers.

Aiton enumerates five different species of the arbutus, and we met with some varieties

of them in the Parisian gardens, that we have not yet seen in our shrubberies.

We have turned over many ancient medical works without being able to meet with the virtues of this plant, excepting that *Amatus Lusitanus* informs us that there was formerly a water distilled from its leaves and flowers, "that is a sacred preservative and antidote against the plague and poisons." Galen, Dioscorides, Pliny, and several later writers, caution us not to eat too freely of the fruit; and however disposed we may be to neglect the first recommendation, we may safely answer for our attention to the second, leaving them as of old for the bird-catchers, to entice their prey in the winter season.

The leaves may be usefully employed by tanners in preparing their leather.

ASH. — FRAXINUS.

*Natural order, Sepiariae. Jasmineæ, Juss.
genus of the Polygamia Dioecia class.*

“ No tree in all the grove but has its charms,
Though each its hue peculiar ;

* * * * *

And ash far stretching his umbrageous arm.”

COWPER.

“ The tow’ring ash is fairest in the woods.” VIRGIL.

THIS tree was called by the Greeks *μελία*, and by some *μελία*. The Latins, it is thought, named it *Fraxinus*, *quia facile frangitur*, to express the fragile nature of the wood, as the boughs of it are easily broken. We are thought to have given the name of ash to this tree, because the bark of the trunk and branches is of the colour of wood-ashes, whilst some learned etymologists affirm that the word is derived from the Saxon *Æsc*.

It will be seen that we have been particularly fortunate in our antiquarian researches respecting this tree, so much celebrated by the ancients, as we have not only discovered the purposes to which it was converted by

mortals in old times, but we have, them dived into the secrets of their gods to learn how the celestials regarded the properties of the ash; and through their fables we learn that Love first made his arrows of this wood; but afterwards he formed them only of cypress. Of what materials the sly urchin makes them at present, we must leave the sighing Damon's and Phyllis's to find out, and console ourselves that at the present time, when mankind and beauty are so encreased upon earth, that he does not make them of ashen poles, whose showers would darken the air, and render it unsafe to move about. We shall give authorities to show, that Mars seized the ashen poles to put into the hands of his disciples,

“ A lance of tough ground-ash the Trojan threw,
Rough in the rind, and knotted as it grew.”

ÆNEIS, Book ix.

Virgil also tells us, that the spears of the Amazons were of this wood, and Homer celebrates the mighty ashen spear of Achilles. It has been surmised in modern times, that when the son of Venus resigned the ash to his father's use, it was on consideration that his grandfather Jupiter should, in consequence of his increased duties, allow him to disperse

his arrows either by gas or steam, or some celestial invention that has not yet been communicated to us mortals.

Tradition has handed down to us an allegory, which we relate, not only to show that the ash was esteemed a sacred tree, but because we recognize in this fable of the heathens, a disfigured, but very striking analogy to the tree of knowledge of good and evil, which proves that the heathens of the earliest days formed the same idea of an Omnipotent Being, and of good and evil, as is expressed by the Hebrew writers. This figurative fable, which is from the Edda, states, that the court of the Gods is held beneath a miraculous ash, whose branches cover the surface of the world, and whose summit touches the heavens ; whilst its roots descend to the regions of Pluto. An eagle constantly reposes on the tree to observe every thing, whilst a squirrel ascends and descends incessantly to make report. Serpents are twined around the trunk ; beneath one of its roots runs a limpid fountain, where wisdom is concealed : it communicates with a neighbouring stream, in which is found the knowledge of things to come.

This ingenious idea signifies that wisdom knows how to profit for the future by

the remembrance of what is useful in the

Three virgins are entrusted with the guardianship of this sacred tree, who always remain beneath the branches to refresh the ash with these salutary waters, which, on falling back on the earth, forms a dew which produces honey : happy effects of the invention of wisdom and science.

The Edda of Woden, holds the ash in so high a veneration, that man is described as being formed from it. Hesiod, who is supposed to have lived in Homer's time, deduces his brazen race of men from the ash ; and in his Theogony has nymphs of the name Μελισσι.

That the ancient writers should so highly extol the ash is not extraordinary, as its inner bark often was the substance they wrote on before the invention of paper. Ancient writers state, that serpents have such an antipathy to the ash that they will not approach even within its morning or evening shadow ; and Pliny tells us, (he says upon experience), that if a fire and a serpent be surrounded by ash boughs, the serpent will sooner run into the fire than into the boughs. He considers it as providential that the ash should blossom before the serpents appear, and that it should

not cast its leaves. until these reptiles were gone.

Dioscorides the celebrated physician to Antony and Cleopatra, assures us, that the leaves of the ash applied to the wound, or the juice of them being mixed with wine and drunk, was a cure for the venomous bite of vipers.

We may still trace in this country the remains of a superstitious veneration towards this tree. In the south-east part of the kingdom, the country people split young ash trees, and make their distempered children pass through the chasm in hopes of a cure. They have also a superstitious custom of boring a hole in an ash, and fastening in a shrew mouse; a few strokes with a branch of this tree is then accounted a sovereign remedy against cramps and lameness in cattle, which are ignorantly supposed to proceed from this harmless animal.

Lightfoot says, that in many parts of the Highlands of Scotland, at the birth of a child, the nurse or midwife puts one end of a great stick of this tree into the fire, and while it is burning, receives into a spoon the sap or juice which oozes out at the other end, and administers this as the first spoonful of liquor to the new-born babe.

Nature, which provides the Greenland bear with its shaggy coat, and adapts the plumage of the feathered race to the height they are destined to soar in the air, has not with less wisdom clothed the vegetable creation with a foliage suitable to their natural destinations. Thus the ash, which was allotted to cover the barren soils of the most bleak and exposed situations, securely locks up its winged foliage and its loose flowers within its black buds, until Boreas has exhausted his March winds, and the early retiring of its sap in autumn, leaves the branches disengaged of their pinnated foliage, before the arrival of the equinoctial gales, thus leaving the trunk and branches too poor for the hurricane to vent its vengeance on. It is therefore well calculated for plantations on those exposed situations on the sea coast, where but few other trees will prosper; and the planting of those few in such situations is often too much neglected, as the dreariness of the downs in the vicinity of Brighton so conspicuously exemplifies, where, if a few patches of ground were ploughed up and sown with ash keys, holly berries, and furze seed, as happy a combination would spring up, as the greatest admirers of light and shade could wish. We make this observation on a September day on

a spot with such scenery before us, where the thinly-scattered but elegant pinnated leaves of the pale ash, and its light hanging bunches of keys, bend with every breeze over the immoveable holly, whose dark shining spiny foliage reflects the vermilion berries which crowd its spiral branches, whilst the approach to their trunks is defended by the chevaux de frize of the gaily yellow and sweetly perfumed furze.

It is with pleasure that we record, that many extensive plantations have within our age been formed in these kingdoms, which reflect the highest honour on the proprietors who thus liberally provide for their posterity, whilst they enjoy the prospect of the rising beauties that their munificence has lent to embellish their country.

Amongst these plantations we shall notice such as have been formed of ash. —

In Suffolk, William Wollaston, Esq. planted twenty acres with this tree, at Great Finborough.

At Buttsfield, Lanchester, Durham, Thomas White, Esq. planted 35 acres.

At Frindsbury, in Kent, Mr. David Day planted 16 acres with ash trees; and 150,800 on 32 additional acres.

At Byscot, near Farringdon, Berks, Edward

Lov. Loveden, Esq. planted 63,000 on 7 acres 9 perches.

At Belmont, Staffordshire, **John Sneyd, Esq.** planted 6,000 between the years 1784 and 1786.

At Ambleside, in Westmoreland, **Dr. Richard Watson, Bishop of Llandaff,** planted 20,000 on 11 acres, in the year 1788.

George Ross, Esq. planted 42,000 in Cromarty. The late Earl of Fife planted no less than 57,500, in the county of Murray,* and his Grace the Duke of Devonshire caused 86,514 to be planted on his estates between the years of 1816 and 1819.

Evelyn tells us, that in his time an ash-tree that had been raised from seed, forty years before, sold for thirty pounds; and he adds, "I have been credibly informed, that one person hath planted so much of this one sort of timber in his lifetime, as hath been valued worth fifty thousand pounds to be bought. These (says he) are pretty encouragements for a small and pleasant industry."

Mr. Boucher has given an instance of the great profit of an ash plantation, in a small experiment, which he thus relates: "On half a rood of heavy meadow, chiefly barren red clay and moss, I planted ash trees six years

* Transact. Soc. Arts, &c.

old, and eight feet high, in rows, four feet asunder, and two feet distance in the row. After four years I cut them down within five or six inches of the ground. Having more than I wanted, in seven years I sold half for pollards and hoops for 40s. In six years I cut them again, and sold them for 50s. In six years after this I cut them again, and sold them at the same price. There remained now twenty-three, intended to stand for timber; but I was obliged to sell them at twenty-three years' growth for 7s. a tree. Thus would an acre of indifferent ground, properly situated for sale, yield in twenty-three years 115*l*. 10*s*., without any other expense than digging the ground for the first five or six years, and cutting the coppice." Observe, that no price is mentioned for the first cutting, which he used himself; and that he found he should have had at least one-third more for the price of the last cutting. He also found that he had planted too thick, and that he might have had more wood if the rows had been six feet asunder, and the sets three feet distant in the row.

"We have heard of a gentleman," says the author of *Practical Economy*, "whose lands were more extensive than fertile, whose practice it was to plant 1500 trees, on the birth

of every daughter, upon his waste grounds, which were, on an average, worth one pound each on her coming of age; thus enabling him to give her a fortune of 1000*l.*, without any extraordinary economy on his part; the regular thinning of the trees, at proper seasons, with barking, &c., paying off all the current expences, besides yielding him a small rent for the land."

This, however, was when 1000*l.* was thought a larger sum for a daughter's fortune than at present; but by stating some experiments of a later date, it will be sufficiently manifested how much planting of trees, even upon small portions of land, is connected with domestic economy, and which will be found in the history of the fir and the sycamore.

In Yorkshire, very recently, 5000 oaks were cut down, which yielded the sum of 160,000*l.*; and as recently, in Somersetshire, the timber of an estate of 2000 acres, was refused to an offer of 50,000*l.*

The number of canals which have lately been cut, and the excellence of the roads in most parts of the kingdom, must act as a great stimulus towards planting, as by the facility with which timber can now be conveyed from the most inland districts to the coast, the price will be more generally equalized.

In remote times, when this island was over-

in woods, timber trees were principally valued for the food which they yielded to herds of swine; and thus, by the laws of Howel Dda, the price of an ash was rated at 4*d.*, while an oak or a beech was put at 120*d.*

“ No want of timber then was felt or fear’d
In Albion’s happy isle.”

At the present time, ash timber meets with as ready a sale, and brings nearly as high a price as the best oak; and although we do not so frequently meet with large ash trees, as we do with large oaks and elms, yet it will be seen that the natural size of the tree is nearly the same. But as it grows so much more rapidly than the oak, so will it sooner decay than that tree, if not felled at maturity. It is observed, that when the woodpeckers are seen tapping these trees, they ought to be cut, as these birds never make holes in the ash, until it is on the decay.

Dr. Plot mentions an ash-tree of eight feet diameter, which was valued at thirty pounds. Mr. Marsham informs us of another in Benel Church Yard, near Dunbarton, in Scotland, which in 1768, measured sixteen feet nine inches in girth, at five feet from the ground. The Rev. Arthur Young, in his Irish tour, mentions some of seventy and eighty feet in

height, which were of only thirty years' growth. The trunk of one on the bank of the Avonmore was above fourteen feet round, and carried nearly the same dimensions for eighteen feet. An ash at Dunganstown was a few years back, twelve feet round, and quite clear of branches for thirty feet, where it measured ten feet round, and the arms extended in beautiful forms twenty-eight yards. At Tiny Park is another, the circumference of which, in the smallest part, somewhat exceeded nineteen feet, or six feet four inches diameter, in 1808. At Leixlip Castle is a row of eighteen ash trees, on a very bleak exposure, measuring from nine to twelve feet round, with fair stems of considerable height, and fine branching heads. At Dönirey, near Clare, in the county of Galway, is an old ash, that at four feet from the ground measures forty-two feet in circumference, at six feet high thirty feet. The trunk has long been quite hollow, and a little school was kept in it. There were a few branches remaining in 1808, which were fresh and vigorous. Near Kennity Church, in the King's County, is an ash, the trunk of which is twenty-one feet ten inches round, and it is seventeen feet high before the branches break out. These are of enormous bulk. When a funeral of the lower class passes by, they lay

the corpse down for a few minutes, say a prayer, and then throw a stone to increase the heap, which has been accumulating round the root. Dr. Walker says he measured the trunk of a dead ash, in the church yard of Lochabar, in Scotland, which, at five feet from the surface of the ground, was fifty-eight feet in circumference.

The Romans used the ash-leaves for fodder, which were esteemed better for cattle than those of any other tree, the elm excepted ; and they were also used for the same purpose in this country, before agriculture was so well understood, and our fields clothed with artificial grasses. In Queen Elizabeth's time, the inhabitants of Colton and Hawkshead fells remonstrated against the number of forges in the country, because they consumed all the loppings and croppings, which were the sole winter food for their cattle. In the north of Lancashire they still lop the ash to feed the cattle in autumn, when the grass is upon the decline ; the cattle peeling off the bark. The Rev. Mr. Gilpin tells us, that, in forests, the keepers make the deer browse on summer evenings on the spray of ash, that they may not stray too far from the walk.

The ash is thought to be a very improper

tree for hedge rows and the borders of arable or pasture land, as its spreading roots exhaust the soil very much, and the drip of the tree is unfavourable to all other vegetation. In good dairy countries the ash is seldom suffered in the pastures, as it is thought to make the butter rank if the cows eat of its leaves, and which is said always to be the case with the butter which is made about Guildford and Godalming, and in some other parts of Surrey, where the ash trees abound in the fields. The correctness of this fact is doubtful, as there is no taste in the ash leaves to countenance the assertion; and we have frequently remarked, that a good housewife has made excellent butter, when her gayer neighbour, on the opposite side of the hedge, could not eat her own churning.

We have already remarked, that the ash tree in early days, served both the soldier and the scholar. It was also a principal material for forming the peaceable implements of husbandry, as it continues to be with us to this day, in the shape of ploughs, harrows, &c. The gardener recognizes it in his spade tree and other tool handles; the hop-planter knows its value for poles, the thatcher for spars, the builder for ladders, the cooper for hoops, the turner for his lathe, the shipwright

for pullies, the boatsman for oars, the fisherman for tanning his nets and drying his herrings. The wheelwright employs it usefully, and the coach-maker profitably, whilst the cabinet-maker palms it upon us as green ebony, and much have we in youth enjoyed the crack and fly of this sweet fuel on the farmer's hearth at harvest-home.

The ashes of this wood afford very good potash, and the bark is used in tanning calfskins.

We have no objection to those who collect ash-leaves drinking the infusion themselves; but such as vend it as pure souchong we wish the utmost rigour of the offended law to visit.

The ash-keys were formerly gathered in the green state, and pickled with salt and vinegar, and served to table for sauce.

The chemical writers who have noticed the ash, tell us that the leaves of this tree yield a great many acid liquors, a little urinous spirit, no concreted volatile salt, a great deal of oil and earth, and a moderate quantity of fixed salt, by which the natural salt of this plant seems to resemble that called by Angelus Sala, *oxysal diaphoreticum*; but in the ash it is joined with a great deal of sulphur and

earth: thus they say it is aperitive, diuretic, and sudorific.

Were we to transcribe all we have seen written on the medical virtues of this plant, it might naturally be asked how it happens that we do not meet our ancestors upon earth, who had in this tree a cure for every malady.

The Arabian, as well as the Greek and Roman physicians, highly extol the medicinal properties of the seed which the Latins named *lingua avis*, bird's tongue, which it resembles.

Dr. Taner, Robinson, and the famous Dr. Bowles, are amongst the later physicians who commend the good qualities of this little seed, and it was from these observations principally that our attention was directed to the formation of the seed; on dissecting the pod of which carefully with a pen-knife, the umbilical cord will be found running from the stalk to the upper end of the fruit, or seed, where it enters, to convey the nourishment to the germ, which (on opening from the reverse end,) will be found the future tree, so formed both in trunk and leaves, as not even to require the assistance of magnifiers to see the perfect plant. We are not aware of its being seen so perfectly in any other seed, therefore we would

direct the attention of the curious to this phenomenon of vegetable nature.

The common ash propagates itself plentifully by the seed, so that abundance of young trees may be found in the neighbourhood of ash-trees, provided cattle are not suffered to graze on the land.

In raising woods or considerable plantations of ash-trees, it is recommended to prepare the ground as for corn, and to sow a good quantity of ash keys with oats. If the crop of corn be taken off at the proper season on the following year, the ground will be covered with young trees. Ash seeds that have been kept over the year, as well as those which are deeply covered with earth, do not come up until the second year.

The variety of the common ash, with pendulous branches, called the weeping ash, is produced by engrafting, and it has at all times a heavy unnatural appearance. But those who admire trees of such singular, distorted shapes, should be careful to plant them where their branches may have full liberty to extend themselves each way, and the tree will then form an agreeable leafy marquee, for the warm season, but it is generally ill placed in the shrubbery, and often very ridiculously planted

in small cottage gardens, where it occupies ground that flowering shrubs should embellish without having room to display its reversed branches to any advantage.

There are varieties of the common ash with variegated leaves, and the *fraxinus simplicifolia*, various leaved ash, is also an indigenous species of this tree, to which we have added two that are natives of Italy, one of Aleppo, and four different species have been imported from North America.

The manna ash, *fraxinus rotundifolia*, is indigenous to Italy, and is found in great abundance in the lower parts of Calabria, where it grows spontaneously, and without culture, except that the woodmen cut down all the strong stems that grow above the thickness of a man's leg. The Duchess of Beaufort introduced this tree to England, where she cultivated it in 1697, but it seldom rises above fifteen or sixteen feet high in this country, and the shoots are shorter and closer together than in the common ash. The leaflets are also shorter, and have deeper serratures on their edges, and are of a lighter green. The flowers which are produced from the side of the branches are of a purple colour, and appear in April before the leaves come out. This tree should be planted in an eastern exposure,

in order to warm the juices in the morning; and to inspissate those which the heat has sweated out in the evening.

Before we relate the manner of gathering the manna from these ash-trees, we shall briefly treat on the nature of manna, and the cause of its formation. The first notice of this substance will be found in scripture, where the term manna seems to signify a miraculous kind of food, which fell from heaven, for the support of the Israelites, in their passage through the wilderness. Salmasius and others affirm, that the manna of the Israelites was in reality no other than a species of honey, or dew, condensed; and that the one and the other were the same with the wild honey wherewith St. John was fed in the wilderness; so that the miracle did not consist in the formation of any new substance in favour of the Israelites, but in the abundance and regular manner in which it was dispensed by Providence for the sustenance of so vast a multitude. Manna is not peculiar to the ash-tree alone, as it is only the extravasated juice of plants, which is discharged more or less by plants in general, according to their nature, and the temperature of the season, which regulates their transpiration. It was formerly thought to be a kind of *mel aerium*, or honey-

dew, which, falling in the night, gathers on certain trees ; but these dews melt in the sun, whereas manna whitens and hardens in it.

The evaporation of leaves, says Decandolle, is one of the most obvious and important of their functions. No person can deny it who has noticed the drops of clear moisture on the points of leaves, even in hot-houses, where they cannot be affected by the dew ; or who has traced the movement of a mist in a still evening, as it raises itself from fields planted with vegetables ; or who has seen the rising of clouds from forests, and the ascent of vapoury columns from the same place before the formation of a storm. In fact, plants lose, by evaporation from their leaves, the greatest part of the moisture which they take in by their roots. The organs which are chiefly employed in evaporation are the slits, and also the hairs, which latter organs are therefore more abundant in young shoots, and in those parts whose evaporation is most active. The sudden and powerful operation of the sunbeams, after a passing drizzling rain, favours not unfrequently the perspiration of oxidized slime, and of sweet drops, which are known by the name of honey dew ; the lime and sycamore usually have a great deal of it on their leaves in the heat of summer, and

which, if steeped in water, renders it sweet and purgative.

That the medicinal drug, known by us under the name of manna, is merely the juices of the various plants condensed by their meeting the air, is fully demonstrated by the manner in which it is obtained from the *fraxinus rotundifolia*. Mr. Swinburn tells us, that in Calabria, the gatherers of manna commence this business about the end of July, by making a horizontal gash, inclining upwards, in the bole of the tree. But as the liquor never oozes out the first day, another cut is given on the second, and then the woodman fixes the stalk of a maple leaf in the upper wound, and the end of the leaf in the lower one, so as to form a cup to receive the gum as it distils from each slash. The season continues about a month. The men have only three carlini, 1s. 1½d., for every rotolo; which quantity, containing thirty-three ounces and a third, is sold for twenty-four carlini and three quarters, or somewhat more than ten shillings; if it be in tubular pieces, the price rises one third. These pieces are called *Manna in cannoli*, and these regular tubes are produced, by applying to the incision thin straw, or small bits of shrubs, upon which the manna runs as it oozes out. Formerly the Syrian

manna was in the most repute, but now it gives way to the Calabrian.

Fuchsius observes, that the peasants of Mount Libanus eat manna ordinarily, as others do honey, whilst at Mexico they are said to have a manna, which they eat as we do cheese; thus we observe it differs in its qualities according to the climate and the vegetables from which it is distilled, and what in one country would afford a nutritive substance to its inhabitants, would prove a medicine when obtained from other plants in a different climate, and taken by a people of different habits.

Physicians are better agreed as to the virtues of this drug, which they originally learnt from the Arabians, than etymologists are to the origin of its name, as some state that it is either from the Hebrew word *manah*, a gift, to intimate its being a gift from heaven; or from *minnah*, which signifies to prepare, because the *mannah* came to them ready for eating, and needed no preparation but gathering; or as some suppose from the Egyptian word *man*, (what is it?) which seems the more probable, in regard the Scripture takes notice of the surprise they were under when they first saw this new food descend.

Salmasius, however, prefers another: according to him the Arabs and Chaldeans used the word *man*, to signify a kind of dew or honey that fell on trees, and was gathered in great abundance on Mount Libanus; on which footing the Israeites did not use the term *manna* out of surprise, but because they found this food fall with the dew, in the same manner as the honey-dew, so well known to them under the name of *man*.

M. Pirolle tells us, that in France the common ash is often attacked by the Spanish flies, which sometimes entirely destroy the foliage, and cause an odour that is both injurious and disagreeable; for when they become decomposed into a dust, it is difficult to pass the trees without inhaling these dangerous particles.

The foliage of the ash tree changes to a lemon colour in October.

“ Like leaves on trees the race of man is found,
 Now green in youth, now with’ring on the ground;
 Another race the following spring supplies,
 They fall successive, and successive rise:
 So generations in their course decay,
 So flourish these, when those are past away.

POPE’S *Homer*.

ASP, OR ASPEN-TREE.—POPULUS
TREMULA.

*Natural order, Amentaceæ. A genus of the
Diacia Octändria class.*

——“Rustling turn the many-twinkling leaves
Of aspin tall.”

THIS aboriginal of our forests moves its restless foliage also in most boggy grounds from Sweden to Italy. It is a branch of the poplar family, and from the incessant trembling of its leaves, was called by the Latins *Populus tremula*. The Greeks named it Κερκίς, from κερκω the same as κρεκω, *strepitundo*, to creak. The English name is from the German *Espe*, which is their general name for all poplars. The heart-shaped leaves of this tree adhere to the twigs by a long and slender stalk, the plane of which is at right angles to that of the leaf, and consequently allows them a much freer motion than other leaves that have their planes parallel with their stalks. This, with their cottony lining below, and their hairy

surface above, causes that perpetual motion and quivering, even when we cannot perceive by other means the least breath of air stirring in the atmosphere. This trepidation is attended of course with a rustling noise, on which account country people often call it Rattler. Ignorance, which has ever been more attached to superstition than to philosophical reasoning, accounts for this phenomenon, from a notion that our Saviour's cross was made of this tree, and that therefore the leaves can never rest.

The plaintive lines of a fair and unfortunate poetess almost give the idea of her joining in the superstition of the Highlanders :

“ Why tremble so, broad aspen-tree?
 Why shake thy leaves, ne'er ceasing?
 At rest thou never seem'st to be!
 For when the air is still and clear,
 Or when the nipping gale, increasing,
 Shakes from thy boughs soft twilight's tear,
 Thou tremblest still, broad aspen-tree,
 And never tranquil seem'st to be.

“ Beneath thy shade, at sultry noon,
 I oft have sat, deep musing;
 And oft have watch'd the rising moon
 Above the dusky summit shine,
 A placid light diffusing!
 Though all around a calm divine
 The rest of nature seem'd to be,
 Still didst thou tremble, aspen-tree !”

The aspen-tree may be planted so as to ornament large grounds, but its effect is lost when crowded. When it meets the eye as a fore-ground to plantations of firs, it has both a pleasing and singular appearance, as its foliage changes with the wind from a silver grey to a bright green; for when the sight goes with the wind, it catches only the under side of the leaves, which are covered with a pale floss; but when it meets the current of air, the tree presents the upper surface of its foliage to the view; thus its tints are as changeable as its nature is tremulous.

Like its relative poplar, this tree is of speedy growth, and will thrive in any situation or soil, but worst in clay. It is accused of impoverishing the land, and its leaves are charged with destroying the grass, whilst its numerous roots, which spread near the surface, will not, it is said, permit any thing else to grow. The wood is extremely light, white, soft and smooth, but durable in the air. It is used for making milk-pails, wooden-shoes, clogs and pattens, &c. The bark is the favourite food of beavers, whilst the leaves and the stalks form the nourishment and birth-place of the *tipula juniperina*, a species of long-legged fly.

• The aspen tree will not bear lopping, like other species of the poplar. Evelyn quaintly observes, "It thrusts down a more searching foot, and takes it ill to have its head cut off."

Gerard, who composed his History of Plants during the reign of a virgin queen, must, we conclude, have possessed but little gallantry, unless he was troubled in his domestic circle by a too animated female tongue; for in his account of the aspen-trée he says, "It may also be called *Tremble*, after the French name, considering it is the matter whereof women's toongs were made, which seldome cease wagging." May not the ladies retort with La Fontaine—

• *Je sais même sur ce fait
Bon nombre d'hommes qui sont femmes ?*

BAY. — LAURUS NOBILIS.

Natural order, Holoraceæ; Lauri, Juss. A genus of the Enneandria Monogynia class.

THIS plant, the laurel of antiquity, is a native of classical ground. The Greeks called it Δάφνη *Daphne*, from διαφάνη on account of the crackling noise it makes while burning. Fable informs us, that our sweet bay owes both its origin and its name to Daphne, the chaste daughter of Peneus, deity of a river so named in Thessaly, whose banks are lined with these trees. The mythologists tell us, that the fair Daphne, flying from the embrace of Phœbus, who had near overtaken her,

— “ Cast a mournful look
Upon the streams of her paternal brook ;
‘Oh, help,’ she cried, ‘ in this extremest need !
If water gods are deities indeed :
Gape earth, and this unhappy wretch intomb ;
Or change my form, whence all my sorrows come.’
Scarce had she finish’d, when her feet she found
Benumb’d with cold, and fasten’d to the ground :
A filmy rind about her body grows ;
Her hair to leaves, her arms extend to boughs :
The nymph is all into a laurel gone ;
The smoothness of her skin remains alone.”

The disappointed Apollo then claimed the tree as sacred to himself.

“ Because thou canst not be
My mistress, I espouse thee for my tree :
Be thou the prize of honour and renown ;
The deathless poet, and the poem crown.
Thou shalt the Roman festivals adorn,
And, after poets, be by victors worn.” OVID.

The Latins called it *Laurus*, from *lavo*, on account of its quality in purging the blood ; or, as some suppose, from *laudis*, praise, and from whence the ancients called it *Laudea*, but in later times the *d* was changed for *r*, making it *Laurus* and *Lauræ*.

This favourite tree of Apollo's gave the name to a capital in ancient times, which is now called Paterno.

“ Deep in the palace, of long growth, there stood
A laurel's trunk, a venerable wood,
Where rites divine were paid ; whose holy hair
Was cut and trimm'd with superstitious care.
This plant Latinus, when his town he wall'd,
Then found, and from the tree Laurentum called :
And last, in honour of his new abode,
He vow'd the laurel to the laurel's god.” VIRGIL.

The ancients believed that the *laurus* was a protection from lightning ; Ovid makes Phœbus give it this virtue :

“ Secure from thunder, and unharm'd by Jove,
Unfading as th' immortal pow'rs above :
And as the locks of Phœbus are unshorn,
So shall perpetual green thy boughs adorn.”

It is related that Tiberius, who had a great dread of lightning when accompanied with thunder, would cover his head with boughs of this tree, and creep under his bed to avoid it. The belief that the bay-tree had the property of repelling lightning lasted a long time after the fall of paganism : Madame de Genlis tells us, that it was on this superstition that the device of the Count de Dunois was founded, which represented this tree beneath a tempestuous sky, and for motto—

Terræ solum natale tuctur.

“ I defend the earth which bears me.”

To this day it is customary for the peasants in the Pyrenees to cover themselves with branches of the bay tree, as a security from the lightning, and we have known it planted by our own villagers as a protection from fire. In this happy effect of ignorance, we trace the expiring spark of Roman superstition.

The aromatic emissions of these trees were in such reputation for clearing the air, and resisting contagion, that during a pestilence the physicians of the Emperor Claudius advised his court to be removed to Laurentium, so celebrated for bay-trees ; and it has been thought that this supposed virtue of the *laurus* was an inducement for Pliny the younger to

reside so much at his favourite villa, near Laurentium.

Theophrastus tells us, that superstitious people would keep a bay-leaf in their mouths all day, to preserve themselves from any misfortune or pollution. The ancients also attributed to the *laurus* the property of preserving the corn from mildew.

Amongst the other wonders related of the bay, its decay was said to be ominous of some fatal accident. Suctonius (in Galba) affirms, that all the bay-trees withered to the very roots in the winter, though it was very mild, which preceded the death of Nero. This accident could only have been deemed fatal to the monster and his creatures !

Evelyn tells us, that in 1629, preceding a great pestilence at Padua, almost all the bay-trees about that famous university grew sick and perished ; upon which it was said that Apollo and the muses were about to desert that city.

We cannot pass this tree in the shrubbery without having our recollection roused by the remembrance of some anecdote connected with ancient history. When under the shade of the bay-tree we almost fancy ourselves in the first temple which was raised to Apollo at Delphi ; for this temple was formed entirely of the branches of this tree, which were

brought from the valley of Tempe; and were so curiously interwoven as to form an elevated roof. Whilst the temple of the god of poetry and music offered nothing but the symbol of glory in its construction it was sacred; but when its walls were composed of marble, and its coffer were filled with those metals which possess the hateful quality of transforming virtuous men into dishonest ones, and bad men into monsters, then the god was worshipped with more ceremony, the oracle despised, and the sacred urns plundered. The people of Phocis, the very inhabitants of Mount Parnassus, committed sacrilege upon their own god, carrying away at one time, from the temple of Apollo, ten thousand talents.

Nero carried away no less than five hundred statues of brass, partly of the gods, and partly of the most illustrious heroes, from this repository of superstitious opulence; whilst, in later ages, Constantine the great removed its most splendid ornaments to his new capital. The deeds of these sceptred robbers are recorded to this day in every known language, whilst their plunder is mouldered to dust!

The oracles were always delivered by a priestess called Pythia, and were generally

given in verse, until it was sarcastically observed, that the god and patron of poetry was one of the worst poets in the world, which induced the priestess to deliver her answers in prose. It was customary for all that consulted the oracle to make rich presents to the god of Delphi; and no monarch distinguished himself more by his donations than Croesus.

There were also diviners called *Daphnephagi*, laurel-eaters, because they chewed laurel leaves, pretending thereby to be inspired by Apollo. The bay-tree was also employed in other kinds of divination and religious cheats, such as throwing them into the fire; when to draw a good augury the leaves must crackle. They put them also beneath their pillows at night, to obtain prophetic dreams; and they were planted around their dwellings to bring good luck.

The origin of the *Daphnephoria*, a festival in honour of Apollo, which was held every ninth year, will show how sacredly the bay-tree was considered to belong to that god. An oracle advised the *Ætolians*, who inhabited Arne and the adjacent country, to leave their own country and go in quest of a settlement; they therefore invaded the Theban territories, which at that time were pillaged by an army of Pelasgians.

When the celebration, of Apollo's festivals arrived, both nations, who religiously observed them, laid aside all hostilities, and, according to custom, cut down branches of the bay-tree from Mount Helicon, and in the neighbourhood of the river Melas, and walked in procession in honour of the divinity. The day that this solemnity was observed, Polemates, the general of the Bœotian army, saw a youth in a dream that presented him with a complete suit of armour, and commanded the Bœotians to offer solemn prayers to Apollo, and walk in procession, with laurel-boughs in their hands, every ninth year. Three days after this dream the Bœotian general made a sally, and cut off the greatest part of the besiegers, who were compelled by this blow to relinquish their enterprize; Polemates, from this, instituted a novennial festival to the god who seemed to be the patron of the Bœotians.

By the manner in which this festival was kept, we may trace their religion from the eastern nations, where the sun was the primary object of adoration; for in this festival it was usual to adorn an olive-bough with garlands of the *laurus* and other flowers, and place on the top a brazen globe, on which were suspended smaller ones. In the middle were placed a number of crowns, and a globe of

inferior size, and the bottom was adorned with a saffron-coloured garment. The globe on the top represented the sun or Apollo, that in the middle was an emblem of the moon, and the others of the stars. The crowns, which were 365 in number, represented the sun's annual revolution. This allegorical bough was carried to the temple in solemn procession, by a beautiful youth of illustrious family, who then officiated as priest of Apollo.

The despatches and letters which were sent to the senate at Rome, from the victorious generals, were made up and ornamented with leaves of the *Laurus*; and in their triumphs every common soldier carried a sprig of bay in his hand, both to denote victory, and as of virtue to purge them from blood and slaughter.

Linnæus surnamed this tree *Nobilis*, from the exalted uses to which it has been applied; for it is the brilliant symbol of all kinds of triumph. It crowns conquerors, and is also the most glorious attribute of clemency. This divine virtue, personified, is represented in the ancient medals under the figure of a female holding a spear, and a branch of the bay-tree:

This tree, whose constant deep-green foliage varies so decidedly the tints in our plantations, causes thoughts and reflections as

various in our walks ; for we do not unite the idea of peace with the olive-branch, more strongly than that of glory with the bay-tree. Henry the IVth of France, before his achievements at the beginning of the civil wars, demanded a new year's gift of Aubigné, who sent him an emblematic nosegay, composed of olive, bay, and of cypress, with a sonnet, the explanation of which was, that he must make a good peace, vanquish, or die.

It was an ancient custom to place wreaths of *laurus* with the berries on the heads of those who had distinguished themselves in some particular branch of polite acquirement; hence our expression poet *laureate*. The poet laureate (" now broache a pipe of Malvoisie,") of modern times tunes his reed so sweetly, that Apollo cannot reward him without the aid of Bacchus, who annually furnishes the happy bard with a butt of malmsey. Some penetrating critics have, since this change, declared that they discovered the wine in the walk of the laureate's poems.

Students who have taken their degrees at the universities are called bachelor, from the French *Bachelier*, which is derived from the Latin *Baccalaureus* (laurel and berries). These scholars were not allowed to marry, lest the duties of husband and father should

take them from their literary pursuits; and in time all single men were called bachelors.

But it is not the bachelors alone who have sighed for the laurus crown; as the wish of her who excited so much interest in the Perditta of Shakspeare will prove:

“Heaven knows I never would repine,
Though Fortune's fiercest frowns were mine,
If fate would grant that o'er my tomb
One little laurel-branch might bloom;
And mem'ry sometimes wander near
To bid it live—and drop a tear!”

It is beyond a doubt, says Dr. Hunter, that the *bay tree*, and not the *laurel*, is the *laurus* of the ancients. The laurel was not known in Europe till the latter end of the sixteenth century, which will be shown in the history of that shrub. Besides, *our* laurel has not the properties ascribed by the ancients to *their* laurus. Virgil says it has a fine smell, which the laurel has not.

*Et vos, O Lauri, carpam, et te proxime, Myrte,
Sic posita, quoniam suaves miscetis olores.*

Ecl. ii.

And in the sixth Æneid,—

Odoratum Lauri ñemus.

We cannot ascertain at what exact period the bay-tree was first cultivated in this country;

but in all probability it was planted by the Romans, and fell with their villas. Chaucer, who wrote in the time of Edward the Third, says,

“ And tho that baren howes, in hir hond,
Of the precious Laurer, so notable,
Be such as were (I woll ye understand)
Most noble Knightes of the Round Table,
And eke the Donesperses honourable;
Which they bere in the sign of victory,
As witness of hir dedes, mightily.”

Turner, our oldest writer on plants, says, in 1564, “ The bay tre in England is no great tre, but it thryueth there many partes better and is lustier than in Germany.” And we find that during the reign of Elizabeth, it was common to strew the floors of distinguished persons in England with bay-leaves. Gerard observes, in 1596, that he had not seen the bay-tree in “ Denmarke, Swenia, Poland, Liuonia, or Russia; or in any of those colde countries where I haue trauelled.” And we conclude that it was rare in this country, even so late as the beginning of the eighteenth century, as Bradley says, in 1716, “ they should be put in pots or cases, and housed in the winter, that their beauty may be preserved.” He states that “ he has seen pyramids, and headed plants of bays introduced into *parterre*

work, but he cannot advise the doing it, lest they should be injured by hard weather." He adds, "the finest bay-trees he has ever seen, either abroad or in England, are now in the Royal Gardens at Kensington, which are of very great value." From Mons. Liger, who wrote in 1703, we learn that these trees were then nursed with great care in the Royal Gardens of France; for he tells us that they were planted in boxes and pots, and cut into pyramids, or globes, to ornament the gardens at Versailles. The bay-tree seems rare in the vicinity of Paris*, at the present time, as we did not meet with it in any garden excepting the *Jardin des Plantes*, either in the summer of 1821 or 1822; and at *Père la Chaise* we only found it at the tomb of Delille, where, should it thrive, our successors will be told we may suppose, that it sprang from his body, as they still tell us in the vicinity of Naples, where, at the tomb of Virgil, they show you a bay-tree that they pretend was produced by the ashes of this great poet, and which is as readily believed as the dream of Maia his mother, who, we are told, dreamt that she was delivered of a branch of *laurus*, and that

* Bay-leaves are in considerable demand in Paris, for domestic uses, and for which purpose they are sent from the south of France in great quantities.

having planted it in the earth, there instantly sprang up a majestic tree, covered with fruit and flowers of every kind. We presume that the *Æneid* was read before this dream was told.

Miraculous days having passed away before the formation of our shrubbery commenced, let us attend to nature, and see where she advises us to plant this *Daphne* of the Greeks, and *Laurus* of the Romans, which furnished the Delphic wreath, and graced the head of triumphant heroes; guarded the gate of the Cæsars, and formed the Pontifex maximus to be placed on the houses of the sick. Observations instruct us to place this tree in situations where it is sheltered from north and north-east winds, which affect its beauty, and often its growth. We notice that it thrives under the very wings of larger trees, where it is difficult to make other shrubs prosper, and which is of importance in our plantations. A warm, dry, sandy, or gravelly soil is recommended for this tree; but we have noticed that it thrives well in a rich loam; for the handsomest bay-tree that we have seen, was planted in such soil, by a lady at Tarring, in Sussex, on her wedding-day; which had sent up its spiral top higher than her dwelling, in less than twenty years; affording ample shade to her playful and numerous offspring.

Its lower branches were the roosting-place of her poultry, and the higher boughs protected the nests of various birds, who treated her with Apollo's strains, for having planted Apollo's tree; which, of itself, refreshes her family by the salubrious perfume it gives to the air of her little garden—to say nothing of the aromatic taste its leaves give to her baked herrings; a dish not to be despised at a country *déjeuné*, as many a sea-side resident will agree, who knows not, or cares not for the happy allusions it affords to the classical reader. They prefer its spicy taste to the finest passages of the ancient poets. But we would wish to inspire our marine friends with a relish for plants as well as for fish: at any rate, to preserve the few trees that nature spontaneously scatters on the coast. For, some years back, we saw a beautiful farm, about a mile from Worthing, swept of every shrub and tree by the farmer, who had purchased it by his profits during the war. We almost regretted at the time that he had not resided in some despotic government, where, at every change of the moon, he would have been scourged with the leafless branches, until his hedge-rows had recovered their wonted foliage. But he resided in a land of liberty, and possessed a right either to please himself or his

wife by exposing his house to every gaze, his fields to every wind. But in charity we will presume that this rural devastation was committed, not through a want of taste, but that it was a sacrifice to the will of his spouse, and that he acted upon the principle of the Duke of Antin, who gratified Louis XIV. by a similar demolition. This monarch complained of a wood that injured the view from his apartment at Fontainebleau, upon which the Duke of Antin caused all the trees to be sawn (secretly) near the root, and cords fixed to each tree, More than 1200 men remained in readiness to fell them at the least signal, when the King, walking near the spot, repeated that this wood displeased him, which was no sooner said, than the obsequious Duke gave a whistle, and in an instant the whole forest was seen to fall. The Duchess of Burgundy, who witnessed this feat, exclaimed, laughing, “ Ah! bon Dieu, si le roi avoit désiré nos têtes, Monsieur d’Antin les feroit tomber de même.”

We have not learnt whether this forest sprang up again; but we are told by Mortimer, that bay-trees whose branches are killed by the weather, or other accident, if cut down to the ground, will send up strong shoots, which we know by experience to be correct; therefore we should caution gardeners against grubbing

up the roots too hastily. This tree should never have a branch taken from it but in the spring. The directions for raising these trees from seed, are given in the same manner by all writers on the subject, from Pliny down to Miller. It is to gather the fruit when quite ripe, which is not before January or February. The berries are then to be preserved in dry sand, until the middle of March, when they may be sown in a shady border of rich loose undunged earth. The berries should be dropped in rows, as French beans are planted, and covered with fine rich mould about an inch thick. The young plants will require frequent, but moderate watering, for the two first years. The French nurserymen raise them under glass, or in an orangery.

The bay-tree will grow by cuttings, but these should be planted in a moderate hot bed, and kept moist, and covered from the heat of the sun during summer, and from the frost in winter. April is the proper time to plant cuttings, but layers may be laid down either in March or August; which, by the second spring, will make good plants.

The variegated bay is increased by budding it on the common sort. Neither the broad nor the narrow leaved varieties are so hardy as the common bay.

The leaves and berries of the bay-tree have an aromatic astringent taste, and a fragrant smell. They are accounted stomachic, carminative, and uterine; but are not much used in medicine at the present day, although old writers are very voluminous in describing their virtues. Some tell us that the leaves were formerly eaten to prevent intoxication, whilst others ate them to produce oracles; from whence the bay is sometimes called the “Prophetic Tree.”

Venturi præscia Laurus.

CLAUDIAN.

BEECH TREE.—See *Pomarium Britannicum*.

BIRCH.—BETULA.

*Natural order, Amentacea. A genus of the
Monocia Tetrandria class.*

“ And all in sight doth rise a birchen tree,
Which learning near her little dome did stow;
Whilom a twig of small regard to see,
Though now so wide its waving branches flow,
And work the simple vassals mickle woe;
For not a wind might curl the leaves that blew,
And as they look’d, they found their horror grew,
And shaped it into rods, and tingled at the view.”*

SHENSTONE.

IN the early days of Rome, the lictors had their fasces made of the branches of this tree, and which they carried before the magistrates to clear the way, beating such as caused obstruction: from hence the most ingenious etymologist we have consulted derives the generic name of the birch. “The Latins,” says Coles;

* Shenstone is not the only poet who has celebrated the mystic power of this dread tree. It is introduced thus in the *Dunciad*:—

“ When lo! a pætre rose, whose index hand
Held forth the virtue of the dreadful wand;
His beavered brow a birchen garland wears,
Dropping with infant’s blood, and mother’s tears.

“ call it *Betula*, and sometimes *Betulla*, from the old verb *batuo*, signifying to beat ; because it was and is often used for that purpose.”

The English word *birch* seems derived from the German *Birke*, or the Dutch *Berk* ; all the European languages are similar in the pronunciation of the name of this tree. In summing up the virtues of this tree, Coles says, in his *Paradise of Plants*, “ The civill uses whereunto the birch-tree serveth are many ; as, for the punishment of children, both at home and at school ; for it hath an admirable influence upon them, to quiet them when they are out of order ; and therefore some call it *Make-peace*.”

However terrible the birchen twigs may be to the idle boy, the man of taste must be pleased with the appearance its slender base and inverted pyramidical top present, and which is heightened by the soft tints of its foliage, that plays with every breath of air

O'er every vein a shuddering horror runs,
 Eton and Winton shake through all their sons.
 All flesh is humbled, Westminster's bold race
 Shrink, and confess the genius of the place:
 The pale boy-senator yet tingling stands,
 And holds his breeches close with both his hands.

POPE.

that stirs. It grows naturally in those cold mountains where the dark fir rises its motionless leaves in the shape of a pyramid; thus contrasting in shape, as much as in colour, and from whence we should be instructed to follow nature in our grouping; for,

“What varied beauties shine upon her face;
Here all is beauty, harmony, and grace!”

The birch approaches nearer the Arctic pole than any other tree; preserving all its vigour in those icy climates, that are almost destitute of other vegetable productions. It flourishes even in the bosom of expiring nature, and is the only tree that Greenland produces—

—— “Where,
Vast regions, dreary, bleak, and bare!
There, on an icy mountain’s height,
Seen only by the moon’s pale light,
Stern Winter rears his giant form;
His robe a mist—his life a storm.”

In Russia, Poland, and other northern places, the twigs of this tree cover the dwellings of the peasants instead of tile or thatch.

In our ornamental plantations the silvery bark of the birch shines as conspicuously through the branches of other trees, as its airiness is marked by the smallness of its leaves,

when contrasted with other natives of the forest. It carries the mind of the man of letters back to early days; for,

Thus is nature's vesture wrought,
To instruct our wandering thought."

The bark of this tree consists of an accumulation of ten or twelve skins, which are white and thin, like paper; the use of which it supplied to the ancients, and of its imperishable nature let us

"Ask, now, of history's authentic page,
And call up evidence from every age."

The books which Numa composed about 700 years before Christ, were written on the bark of the birch-tree; and, if we may depend on the testimony of Pliny and of Plutarch, they were found in the tomb of that great king, where they had remained four hundred years. Numa had forbidden his body to be burnt, according to the custom of the Romans; but he ordered it to be buried near Mount Janiculum, with many of the books which he had written. The body of this philosophical monarch was entirely consumed by time; but the books, which treated of philosophy and religion, were in such a state of preservation, that Petilius, the prætor, undertook to read

them by command of the senate. On the report which he made respecting their contents, they were ordered to be burnt; for, as they contained the reasons why he had made innovations in the form of worship, and in the religion of the Romans, their being made known to the citizens might have endangered the prosperity of their state, as it must have appeared that their religion was built upon error, and that it was merely political.

Evelyn tells us, that, in a history of Sweden, it is stated that the poor people grind the bark of birch trees to mingle with their bread-corn.

Christopher the Third, king of Denmark, in 1450, received the unjust surname of *Berka Kanung*, which signifies king of bark, because, in his reign, there was such a scarcity, that the peasants were obliged to mix the bark of this tree with their flour. It is to be regretted, that the thoughtless people of every kingdom charge their monarch with all the afflictions which befall their country. The cares of the state are but ill repaid by undulterated bread, or luxurious diet! The men who fill these perilous situations should at least receive, if not *our love, our pity*.

Although every species of tree, or plant that we look upon in the shrubbery creates a

new idea, or gives a fresh turn to our thoughts; yet, perhaps, no two persons think alike during such contemplation; for different minds incline to different thoughts, as different men pursue different objects.

“ On this side and on that, men see their friends
Drop off, like leaves in autumn; yet launch out
Into fantastic schemes, which the long-lives
* In the world's hale and undegenerate days
Could scarce have leisure for.”

These were the reflections of Blair. The magistrate must think of the Roman lictors when he sees the birch, as naturally as the country pedagogue will think of the truant, or the truant of the pedagogue. The chancellor who becomes broomseller will reflect how inadvertently laws may be broken. The nautical man pictures to himself our early navigators, in their precarious though skin-lined barks of birchen basket-work.

The antiquarian and the historian, as they pass this tree, will have repassing in their minds the events of ancient times, that have been made known to us by the bark of the birch. The military man sees in the birch, the tree that afforded the old English warriors arrows, bolts, and shafts; and our artillery-men behold a wood whose charcoal gives them their com-

bustible powder. The botanist, finding nothing but anthers in the catkins that so securely protect the pollen until the female flowers expose their stigmas in the spring, to catch the impregnating dust which forms the future forest, exclaims, with Thomson.

“ Was every faltering tongue of man,
Almighty Father! silent in thy praise,
Thy works themselves would raise a general voice;
Even in the depth of solitary woods,
By human foot untrod, proclaim thy power.”

The physiological student, knowing how abundantly this tree abounds in juices, says,

“ Mark, too, the sap, that, ere its process ends,
In course alternate, rises or descends;
In active virtue, how its liquid power
Creates the wood, the leaf, the fruit, and flower.”

The vernal sap of these trees is well known to have a saccharine quality; and from it the forest housewife makes an agreeable and wholesome wine. Pomona's bard says,

———“ Even afflictive birch,
Cursed by unletter'd idle youth, distils
A limpid current from her wounded bark.
Profuse of nursing sap.”

Loudon tells us, in the *Encyclopædia of Gardening* (page 189), that a birch-tree has been known to yield, in the course of the

bleeding season, a quantity of sap equal to its own weight. This sugary sap is obtained by boring holes in the body of the tree, in the beginning of March, before the leaves shoot out, and placing in the hole a fósset made of an elder stick, with the pith taken out; setting vessels, or hanging bladders to receive the liquor. It is common to tap large trees in four or five places at a time; and a number of trees should be bored on the same day, so as to afford a sufficient quantity of juice in a short time; for the sooner it is boiled the better. It was formerly sweetened with honey, but lately sugar has been substituted to the proportion of from two to four pounds to every gallon of liquor. This is gently boiled as long as any scum rises; which is cleared as fast as it forms. It is then put into a tub to cool, after which it is tunned into a cask, and bunged up when it has done working. It is ready for drinking when a year old. This wine is said to be aperitive, detersive, and cosmetic. Formerly, when spice was more used in wines, cinnamon was added to birch wine.

It is thought that the trees are but little injured by being thus perforated in the spring, when the sap is ascending. Evelyn says he observed a birch that had been for many

years regularly tapped, which thrived and grew to an unusual size for this kind of tree.

This tree, which some learned etymologists think gave the name to Berkshire, should have a place in all extensive shrubberies, or plantations, from its picturesque appearance, and from its being amongst the earliest trees that regale us with its fragrant buds. Indeed, this vernal perfume seems renewed after every shower, and those birch-trees whose pliant twigs are pendent, we consider more cheerful and not less beautiful, than the weeping willow.

The timber of this tree is less valuable than most others in our woods, yet it may, in certain situations, be turned to good account, since it will grow to advantage upon land where other timber will not thrive. Miller says it loves a dry barren soil, where scarcely any thing else will grow; and will thrive on any sort of land, dry or wet, gravelly, sandy, rocky, or boggy; and those barren heathy lands which will scarcely bear grass. In Martyn's edition of Miller, we are told that upon ground which produced nothing but moss, these trees have succeeded so well as to be fit to cut in ten years after planting, when they have been sold for near ten pounds the acre standing, and the after produce has been considerably increased; and as the woods near London

have been grubbed up, the value of these plantations have been advanced in proportion. For this reason, those persons who are possessed of such poor land, cannot employ it better than by planting it with these trees, especially as the expense of doing it is not great.

The wood is used for packing-cases, turners' ware, wooden shoes, and clogs; also for gates and rails. It likewise makes excellent charcoal. The branches are woven into hurdles for the shepherd, and the twigs are bound into besoms for the housewife. The bark is of great use in dyeing wool yellow, and particularly in fixing fugacious colours. The Highlanders use it for making ropes for their wells, whilst their tanners use it for tanning leather; and they sometimes burn the outer rind instead of candles. The leaves afford good fodder to horses, kine, sheep, and goats. The seeds of the birch-tree are the favourite food of the siskin, or *fringilla spinus* of Linnaeus, a bird of passage commonly called Barley-bird in Sussex, because it visits that county in the barley seed-time.

Old medical writers tell us that the leaves of the birch-tree are good for the dropsy; and that next to the juniper, the wood was esteemed the best to burn in times of pestilence and contagious distempers.

Gerard says, the branches “serve well to the decking up of houses and banquetting roomes for places of pleasure, and beautifying the streetes in the crosse or gang weeke, and such like.”* And Coles observes, in 1657, that as he “rid through little Brickhill, in Buckinghamshire, every signe post in the town was bedecked with green birch.”

* This was rogation week, which was called in the north of England, gang week; from the *ganging*, or processions then used, by the people’s going to confession. The Belgians call it *cruis*, or cross week, as it was also called in some parts of England; because the cross was carried before the priests in the processions made in that week. It is called rogation week from *rogo*, to ask or pray; because on Monday, Tuesday, and Wednesday, the litanies are sung, and abstinence from flesh is enjoined by the church, not only by a devout preparation to the feast of Christ’s glorious ascension and pentecost, but also to supplicate the blessing of God on the fruits of the earth.

BIRD CHERRY.—PADUS.

*Natural order, Pomaceæ. Rosaceæ, Juss. A
genus of the Icosandria Monogynia class.*

——“Check the progress of thy vasty toil:
First choose thy objects from thy native soil,
Where, daily seen, they own thee for their lord,
And, born with thee, shall greater joy afford.”

DELILLE.

THIS aboriginal of our woods possesses beauties that should oftener secure it a situation in the shrubbery, and more frequently a place in ornamental hedge rows; for at the present day it is more uncommon in our plantations than the flowering shrubs of Persia, China, or America. Let us not, in our admiration of exotic beauties, and love of foreign talent, neglect our native plants, or impoverish our national abilities. Too often we see the well educated daughter of an English clergyman, neglectedly drudging through the yearly duties of a governess for the paltry pittance of twenty pounds, whilst the daughter of a Swiss peasant or a Parisian perriwig-maker is caressed and rewarded with from five to ten times the sum.

The Latin name of *Padus* for this tree was derived, according to Parkinson, from the offensive smell of the wood; but we are more disposed to think that the Romans named it after their celebrated river Padus, now called the Po. The berries are eagerly sought after by the birds, and as the leaf slightly resembles that of the cherry-tree, hence the name of Bird-cherry. In Scotland it is called Hog-berry. Linnæus has united the bird cherry, the apricot, the cherries, and the common and Portugal laurels, with the plums. Miller treated on them separately, under, *padus*, *armeniaca*, *cerasus*, and *prunus*; uniting the laurels with *padus*; Jussieu separates *cerasus* and *armeniaca* from *prunus*; and unites *padus* and the laurels with the former: making the difference to consist only in the fruit or drupe. The French call it *cerisier à grappes*.

This pretty flowering shrub was much more common in the time of Gerard than at present. He tells us that in 1596 it grew wild in the woods of Kent, where it was used as a stock to graft cherries on, particularly the Flanders cherry. This old author adds, "This wilde tree groweth very plentifully in the north of England, especially at a place called Heggdale, neere unto Rosgill, in Westmerland, and in diuers other places, about

Crosbie Ravenswaith, and there called *hey-berrie* tree : it groweth likewise in Martome Parke, fower miles from Blackburne, and in Harward, neere thereunto ; in Lancashire almost in euerie hedge." It is also a native of most parts of Europe, in woods and hedges, and is frequently to be seen in the northern and temperate parts of Russia, and all Siberia, and it is common to the woods of Scotland.

The bird cherry rises from ten to fifteen feet in height, spreading its branches to a considerable distance, which are covered with a purplish bark. Neither its branches or leaves are numerous, therefore almost any plant will grow beneath it ; and we love to see its stem rise out of a clump of juniper or any dwarf evergreens over which its long loose pendent bunches of white flowers hang with peculiar airiness and grace in the months of April and May. Its black fruit, which hang in bunches like currants, have also a pleasing effect in the month of August, and the yellowish green of its ovate-lanceolate foliage is not less pleasing when contrasted by darker tints. Although the fruit is nauseous to the taste, it gives an agreeable flavour to Brandy, and many persons add it for the same reason to their made wines. The wood is tough and smooth, and used for whip and knife handles.

Linnaeus says, that sheep, goats, and swine, eat the leaves, and that cows are fond of it, but that horses refuse it.

The variety with red fruit, commonly called the Cornish cherry, flowers two or three weeks later, and is therefore not so desirable in the shrubbery.

The bird cherry may be propagated by layers, which should be performed in the Autumn; but the handsomest trees are raised from seed, which should also be sown at the same season upon a bed or border of good ground. A wet soil is not congenial to this tree.

Medical writers tell us that a decoction of the berries is sometimes given with success in the dysentery; and Dale informs us that in his time the fruit was used to hang about the necks of children, as a cure for the epilepsy. A strong decoction of the bark is used by the Finland doctors, who have private doors for private patients, and its beneficial effects are corroborated by the testimony of M. Broerland, in the Stockholm acts. He directs six ounces of the dry, or eight of the fresh bark to be boiled away in eight pints of water to four: the dose is four ounces four times a-day.

BLADDER SENNA. — COLUTEA.

*Natural order. Papilionaceæ, or Leguminosæ.
A genus of the Diadelphia Decandria class.*

— “ Various trees their various fruits produce,
Some for delightful taste, and some for use;
Hence sprouting plants enrich the plain and wood,
For physic some, and some design’d for food.”

“ How useful all ! how all conspire to grace
Th’ extended earth, and beautify her face !”

BLACKMORE.

THE dramatic author seeks for singularity of character to make his comedy amusing, which at the same time acts like a foil to render his beauties more brilliant, whilst the insipid novelist, who treats us only with lilies and roses, sees them wither unnoticed for want of contrast.

Thus we introduce the *colutea arborescens* into our shrubbery, not so much, for the beauty of its dingy yellow papilionaceous blossoms, as for its curious inflated and transparent bladder-like legumes, which being slightly suspended from the slender spray, have a novel and odd effect between the winged leaves of this plant, which are composed of

four or five pairs of oval heart-shaped lobes, placed opposite, and terminated by an odd one.

Children find amusement in dancing on, or pressing these little bladders between their fingers, which make a considerable explosion as the air escapes; hence the French name this shrub *Baguenaudier*, "fruit dans des vessies rougeâtres qu'on fait claquer par la pression pour baguenauder, d'où son nom."*

The Hortus Kewensis states from Lobel, that this plant was first cultivated in England in 1570, but on referring to the third part of Turner's Herbal, which was printed in 1568, we find that it was then common in this country. This author says, "There hath bene a greate errour of late yeares amonges many men, whiche haue thought that sene had ben a tre, which groweth in manye places of Englande." He then describes the true senna, and adds, "The tre that they call sene in England is colutea."

Gerard says, in his History of Plants of 1597, "*Colutea*, and sene, be so neere the one vnto other in shape and shew, that the vn-skilful herbarists haue deemed *colutea* to be the right sene." He adds, "*Colutea*, or bastard

* Pirelle.

sene, groweth in diuers gardens, and commeth vp of seed ; it quickly commeth to perfection, insomuch that if a stick thereof be broken off and thrust into the ground, it quickly taketh roote, yea, although it be done in the middle of sommer, as myselfe haue often prooued ; the which bring forth flowers and fruite the next yeere after."

Most writers on plants are of opinion that the ancient Greek and Latin medical authors were unacquainted with the true *senna*, and that its virtues were made known to us by the Arabians, who call it *sena*. The bladder or false *senna*, *colutea*, is the *κολούτεια* of Theophrastus, whose writings inform us that in the neighbourhood of Athens it was used to fatten sheep, which it greatly facilitated. We are not aware that the experiment has ever been made in this country, but the philosopher's observation is worthy of notice to those who have flocks on the downs, where it would grow as well as furze if sown in the same manner.

Parkinson, in "The garden of pleasant Flowers," which he dedicated to Henrietta, the beautiful queen of the unfortunate Charles the First, tells us that the leaves of the bladder *senna* are known to be a violent purgative "and therefore let every one beware that they

use not this instead of good senna, lest they feel to their cost the force thereof;" but later authors assure us that the leaves answer all the purposes of senna, and Allioni has given particular directions for the preparation of them: The seeds, in a quantity of a dram or two, excite vomiting.

This plant grows without culture in the south of France, the warmer parts of Switzerland, and in Italy, especially on mount Vesuvius, where Mr. Ray found it even in the ascent to the crater, where there were scarcely any other plants, and where

——— " the mountain shakes,
Burnt to its entrails; while in thunder breaks
Its bursting sides; torn from their native bed
The splinter'd rocks their smoky ruin spread."

DELILLE.

The foliage of this plant is of a greyish green, and it will grow to the height of 10 or 15 feet in the shrubbery, where it is seldom to be seen without some few blossoms, from May to November. The bladders are in their beauty in September, but they do not open to expose the double row of their inmates until October has ripened and blackened their little kidney-shaped seeds.

The pericarp of this fruit is not more delicately than beautifully veined. The two

valves which form the legume, or bladder, are so securely closed, as not even to allow the confined air to escape. The upper side of the valves is joined by two umbilical cords, which first convey the impregnating farina from the top of the pod to each of these little vegetable eggs, after which their nourishment enters the cord from the stem, until they have acquired the power of becoming parents to future shrubs.

The oriental bladder senna, *colutea cruenta*, was discovered in the Levant by Tournefort, whose method of classifying plants stood unrivalled until the labours of Linnæus appeared. This plant, which is now common in the shrubbery, was cultivated by Miller in 1731. Its flowers are smaller than the common sort, and of a dark-red colour marked with yellow.

The Levant *colutea* bears the name of Pocock's bladder senna, because the seeds were first brought to England by the Rev. Dr. Pocock, who gathered them in Turkey.

This shrub seldom grows more than six or seven feet high; the branches are very slender, and much more pliant than those of the common sort, and therefore it grows less erect. It is also distinguished from the common sort by the leaves being composed of

nine pairs of leaflets, which are much smaller. It flowers also a month earlier, and the blossoms are of a brighter yellow, and there is a succession of them till late in the Autumn, on which account it is preferred in our shrubberies. Dr. Russell, who resided many years at Aleppo, informs us that this shrub is very common about that city. These plants are all easily propagated by sowing their seeds in the spring in a bed of common earth. The plants raised from suckers are never so fine as those produced from seed; and Mr. Curtis tells us (he says from experience) that a wet soil is fatal to the common bladder senna. Mr. Miller recommends the hanging of lobster claws, or bowls of tobacco pipes, on these shrubs, to entice the earwigs, who eat their way into the bladders; and thus housed destroy the seed.

BOX-TREE. — BUXUS.

Natural order, Tricoccæ. Euphorbiæ, Juss. A genus of the Monœcia Tetrandria class.*

“How goodly looks Cytorus, ever green,
With boxen groves.”

DRYDEN'S *Virgil*, *Geo.* ii.

THIS tree, which so beautifully bedecks and gives a vernal appearance to our Surrey hills in the depth of winter, was called by the Greeks Πύξος, from πύκα, dense, thick; δια τὸ πυκνὸν τοῦ ξύλου, the timber being very dense and close.

We consider the English name of this plant to be a corruption of the Latin word *buxus*, or from the Spanish *box*, and that it gave the name of box to those little wooden cases made by the turner, rather than derived its own from these cases. This shrub certainly gave the name of Box-hill to those delightful downs near Dorking, in Surrey, and where the shrub seems to have grown naturally, as it is known to have abounded there long before the time that the Earl of Arundel retired to that spot, and as it is stated, planted the box.

Evelyn did not neglect to visit this spot, as we find by his diary, 27th July, 1655, where he writes, "I went to Boxhill to see those rare natural bowers, cabinets, and shady walks in the box copses." He also observes that "at Mickleham there are goodly walks, and hills shaded with yew and box, as render the place extremely agreeable, it seeming from these evergreens to be summer all the winter." He tells us in his *Silva* that "these trees rise naturally at Boxley, in Kent, in abundance, and the county of Surry, giving name to that chalky hill near the famous Mole or Swallow."

This spot is still visited by the admirers of beautiful scenery; but in the time of Charles the Second, before the inhabitants of the court and the city of London were so well acquainted with the baths of Neptune, the neighbourhood of Boxhill and the waters of the Mole were thought of sufficient efficacy, and of a sufficient distance, to dissipate both gloom and disease.

The box was formerly much more plentiful in England than at present; Boxwel, in Coteswold, Gloucestershire, was named from this tree; and Gerard says (in the time of Elizabeth), "It groweth upon sundry

waste and barren hills in Englande." And Parkinson tells us, in the time of Charles the First, "that it is found with us in many woods, and wood grounds." Woodward remarks it as plentiful on the chalky hills near Dunstable. It is also a native of most parts of Europe, as well as of many parts of Asia, as about Mount Caucasus, in Persia, China, Cochin-China, &c., and also in America. Pliny tells us that the largest box-trees grew anciently in Corsica, and in so great abundance that it caused the honey of that island to be bitter. In Persia the box-shrub grows to a considerable-sized tree, and of so elegant a form, that the Persian poets often compare their beautiful grown women to these trees. Ghilan, one of the Persian provinces, is remarkable for growing great quantities of box-wood, on which account their caravans consist of horses, mules, and cows; for camels are not brought into the province, because they have an extreme fondness for box, which causes their immediate death if they eat of it.

We believe box is the only European wood that will sink in the water, and that is sold by weight. Pliny observes, that it is as hard to burn as iron, and that it will neither flame nor burn clear, nor can it be converted into charcoal. He tells us that it was highly valued

for its hardness and yellow colour; and Virgil says —

“Nor box, nor limes, without their use are made,
Smooth-grain’d, and proper for the turner’s trade;
Which curious hands may carve, and steel with ease
invade.” }

From the Latin poets we learn that this wood was then employed as at present, in forming musical flutes. —

Si buxos inflare juvat. VIRGIL.

“If it pleases you to breathe into the box.”

——— *non illos carmina vocum,
Lengave multifori delectat tibia buxi.* OVID.

“Neither does the melody of the voice, nor the long pipe of many-holed box delight them.”

The ancients, also, made combs of this wood, as may be seen in Martial. In modern times, Cowley has thus mentioned it:—

——— *non ultima belli
Arma puellaris; laqueos hæc nectit amantùm,
Et venatricis disponit retia formæ.*

And which is thus translated in the *Silva*:—

“box-combs bear no small part
In the militia of the female art;
They tie the links which hold our gallants fast,
And spread the nets to which fond lovers haste.”

Evelyn also states, that “It is of special use for the turner, engraver, carver, mathema-

tical instrument-maker, comb and pipe or flute-maker ; the roots for the inlayer, and cabinet-maker," &c. It is still in great demand with the turner for screws and numerous other articles, as well as for making musical wind-instruments. German flutes have been principally formed from this hard and smooth wood ; but the professors of that instrument now prefer those that are made from the cacao-tree, as they are not so subject to swell by using as those made from box-wood ; which swelling often causes a variation of half a note, as after being played upon for a short time the tone becomes sharper.

We do not find that the physicians of ancient days or modern times have used this vegetable in medicine ; but the quacks of ignorant ages suffered nothing to escape them by which they could impose on the credulous, and in their works we find the virtues of the box extolled for diseases that delicacy forbids us to mention.

We perfectly agree with old Gerard, who observes, " that it is more fit for dagger-hafts than to make medicines ; though foolish empiricks and women leaches do minister it against the apoplexy, and such diseases."

From Parkinson we learn that it was used to change the hair to an auburn colour ; and in the ephemerides of the curious there is the

following account of the efficacy of box-wood in making hair grow: "A young woman in Gunbery, in Lower Silesia, having had a malignant dysentery which occasioned the falling off of all her hair, was advised by a person some time after her recovery (as her hair was not likely to grow again of itself, her head being then as bare as the hand) to wash it all over with a decoction of box-wood, which she readily did, without the addition of any other drug. Hair of a chesnut colour grew on her head, as she was told it would do; but having used no precaution to secure her face and neck from the lotion, they became covered with red hair to such a degree, that she seemed but little different from an ape or a monkey."

If this poor Silesian girl was actually thus disfigured by the box, it was not more than the box-tree itself has been disfigured in our old gardens; where, by the aid of shears, it was metamorphosed into Harlequins and Columbines; and even at present we sometimes see the attempt of transforming it's branches into vegetable peacocks and leafy urns, which must be as offensive to Silvanus as it is to nature. Pliny tells us, that it was used in the Roman gardens to divide them into squares, &c., where it was kept thick by clipping. It

is now judiciously admitted into the pleasure-grounds, as this evergreen will flourish under the deepest shade, and will thrive in any soil or exposure, although it is fond of a calcarious soil, and a dry situation open to the sun. In appearance it is but little inferior to the myrtle, and therefore deserves a place in the shrubbery, as a fore-ground evergreen. The branches were in great request among our ancestors for decorating their houses, and it is still used to fill up spaces between exotic plants that are let out by rout florists. We also meet with it in our churches at Christmas; for the origin of which custom, see Holly.

Where box-trees are required, they should be raised from seed, which should be sown soon after it is ripe, in a shady border of light loam or sand; but it is generally propagated by cuttings planted in the autumn, and kept moist until they have taken root.

Dwarf box is increased by parting the roots or planting the slips. The best time for transplanting this shrub is October; though it may be removed almost at any time, except summer, if it be taken up with a good ball of earth.

BROOM.—SPARTIUM.

*Natural order, Papilionaceæ, or Léguminosæ.
A genus of the Diadelphia Decandria class.*

——— “the broom,
Yellow and bright as bullion unalloyed,
Her blossoms.”

THIS shrub, whose rushy twigs are so gaily decked with vegetable butterflies of flaming gold, has caused much dispute amongst the learned etymologists whether it be the *Spartium*, Σπαρτίον, of Dioscorides or not. The Latins called it *genista*, and their great natural historian (Pliny) says that he was not able to ascertain whether *genista* was the same as *Spartium* or not; but from what he has stated, as well as from what the oldest Greek authors have written, we are of opinion that the *Spart* of the old Greeks was not the same as the *Spartium* of later days. The first cordage and ropes which the Greeks made for their nautical vessels was formed of rushes, and their word σχοινός signifies equally a rush and a rope; but when they became acquainted with

Spain, where this rushy shrub grows in abundance, particularly about Carthage, cordage was formed from those twigs, and most probably the broom was then first called *Spartium* by the Greeks. The origin of its Latin name *genista*, or *genesta à genium flexilitate*, from its flexible nature; or, according to some, *quod facile generet, speciemque propagaret*, because it is easily increased, and with difficulty destroyed in its natural situation.

The English name of this plant, which Turner spelt "browme," has no resemblance to any other language except the Dutch, who call it *brem*.

"Even humble broom and osiers have their use,
And shade for sheep, and food for flocks produce;
Hedges for corn, and honey for the bees,
Besides the pleasing prospects of the trees."

The broom being thus recommended to us by the Prince of the Latin Poets, has a strong claim to a situation in the shrubbery, particularly the Spanish broom, *Spartium junceum*, which was an inmate of our gardens prior to 1564, when Turner wrote his 'Herbal'; for he says, "It came of late to us out of Spain." Perhaps it was given to us by Spain, when their king was a husband to a British queen; and however slight such a gift might have

appeared at the time, it now shines more ornamentally in the gardens of this country than the brightest gem of the mines of the New World could have done in the crown.

In favourable situations, the Spanish broom approaches nearer to the size of a tree than an humble shrub; and as it continues in blossom from July to October, it is a great enlivener to Nature's universal green robe, which at that season is but slightly spangled with gay colours; therefore it may with great advantage be planted so as to peep over the sombre evergreens, like the rays of the sun emerging from dense clouds. The common broom, *Spartium scoparium*, may as judiciously be placed at the foot of towering trees, where it will shine as gay in the gloom as a gipsy's fire in a forest.

The broom should also be planted in the corners of fields, and in those hedgerows which are seen from the shrubbery or the dwelling; particularly where the view is caught beneath or through the branches of trees, for then the yellow field is seen as gaily interchanged with a variety that is as rich and as pleasing as the tiara of emeralds and gold.

"Where the fond eye in sweet distraction strays,
Most pleased when most it knows not where to gaze!"

The Portugal broom, *multiflorum*, is as pleasing by it's delicacy, as the Spanish broom is enlivening by it's gaiety. This shrub, which appears in May and June, clad like a virgin bride in pearls, should be placed where it's flexible rods are contrasted by broader foliage. It forms one of the most elegant fore-grounds to dark evergreens, and harmonizes well with most flowering shrubs; for it's rushy spikes, which seem rather studded with flakes of snow than bedecked by Flora's hand, are too delicate to offend by any neighbourhood, however flaunting it may be, whilst it's graceful waving bend so well accords with the chastity of it's colour. The white flowering broom is now considered as a hardy plant in our shrubbery; although no longer back than 1724, when Miller published his first edition of the Gardener's Dictionary, he writes in it, "The Spanish white broom is a very tender plant in England, and will seldom stand out the winter; therefore it is cultivated in pots, and kept as bays, laurus tinus, myrtle, &c."

We have now two species of white flowering broom. The first, we are told in the Hortus Kewensis, was introduced by Mr. Bentick, in 1690; but Parkinson speaks of it familiarly in 1640, but does not say posi-

tively that it was or was not then cultivated in England.

Clusius, the celebrated German botanist, who with such indefatigable labour collected the plants of Spain, Languedoc, England, the Alps, Austria, some parts of Hungary, and those about Frankfort, during the 16th century, tells us, that he observed the white single-seeded broom, *monospermum*, about Cadiz, near the coast, flowering in February, and also abundantly in Arragon. Osbeck remarks, that it flourishes like willow bushes along the shores of Spain, as far as the flying sands reach, where scarcely any other plant grows except the creeping restharrow. The use of this species of broom is very great in stopping the sand. It converts the most barren spot into a fine odoriferous garden by it's flowers, which continue a long time. The leaves and young branches are delicious food for goats. It serves to shelter sheep, goats, and hogs, from the scorching heat of the sun. The twigs are used for tying bundles; and all kinds of herbs that are brought to market are fastened together with them. The Spaniards call it *retamas*, from the Arabic name *rælam*. Forskahl tells us, he found this plant in Arabia; and Desfontaines in Barbary, on the sandy coast.

The *Spartium multiflorum* is a native of Portugal and Mount Atlas. It was first introduced to this country by Mr. James Gordon, about the year 1770. We have now thirty distinct species of broom; some of which have several varieties, which we shall pass unnoticed, excepting the Spanish broom with double blossoms, which is very unusual, in papilionaceous flowers.

The common broom is not deficient in its uses in rural economy and medicine. In most country villages it is known to the housewife as affording besoms for sweeping; from whence originated the name of "broom" for those domestic cleansers. Ammianus Marcellinus, a Roman historian of the fourth century, relates, that in his time there flourished at Rome the broom, which was made use of to clean the place where the nobility assembled; which presaged, says this pagan author, that men, the very dregs of the people, would be raised to the first ranks.

In the northern parts of Great Britain it serves for thatching cottages, corn, and hay ricks; and it makes an excellent substitute for reeds in fences or screens. In some parts of Scotland, where coals and wood are scarce, it is said whole fields are sown with it for fuel. The branches are known to be capable of

tanning leather, and of being manufactured into cordage or coarse cloth. Pliny tells us, (Book xix. Chap. 2.) that the shepherds in Spain clothed themselves with it, and covered their dwellings with the branches; made themselves shoes with it; and that it formed their fuel and their torches; and he affirms, that no cordage is so durable in salt water as that made from the fibres of the broom. He states, that it rather improves in the water than decays; although, for dry purposes, it is not so lasting as ropes made from hemp. It appears to have been universally employed in his time for nautical purposes.

This author also tells us, (Book xix. Chap. 1.) that in Asia, they steeped the broom in water for ten days, to obtain the fibres more easily; of which they made their fishing nets, because they endured the water without rotting better than other nets.

It is well known how eagerly the inhabitants of the hive hunt for their sweets in the gay blossoms of the broom; which in ancient times, when honey was the domestic sweet, and sugar was only known as a medicine, it was of the utmost importance, as we have already noticed under the head of Thyme; but to which we shall add what

Pliny tells us (Book xxi. Chap. 12.) from his own knowledge. — The inhabitants of Hostilia, a town on the banks of the Po, when they observed the food of the bees began to fail, took the hives up in the night when the bees were housed, and placed them in a kind of boat or barge, which they rowed four or five miles up the river, and in the morning the bees went out and found flowers that had not been robbed of their nectar; and this they continued to do, until the bee-masters perceived the boats sink to a certain depth by the weight of the honey and wax thus collected, when they were floated home to discharge the treasure which these emblems of industry had rifled from the bosom of Flora.

The peasants in Switzerland have a similar practice to this day; for in the spring of the year they pack up their dairy implements, and drive their large herds of cows up the mountains, where they feed during the summer; and the business of making cheese is continued in their *challets* or little huts until the autumn, when the cattle is driven home, and the cheese delivered to the proprietors. The emigration to and return from the mountains is equally looked forward to with pleasure. The first cow of each drove has the largest bell

attached to its neck, and ascends and descends the mountains, decorated with chaplets and wreaths of flowers.

It seems a day of rejoicing with the kine as well as the peasants, for they express their joy equally on their departure and return, by loud and continued lowing.

The flower-buds of the broom, just before they become yellow, are pickled in the manner of capers, and eaten as such in sauce. Many think them wholesome for the stomach, and good against diseases of the spleen and liver. Dr. James says, "Broom is an aperitive and hepatic shrub, opening obstructions of the liver and spleen; and is very good for the dropsy, when infused in common drink." Dr. Mead relates the case of a dropsical patient who was cured by taking half a pint of a decoction of green broom-tops, with a spoonful of whole mustard-seed, every morning and evening: the patient had been tapped three times, and had tried the usual remedies before. An infusion of the seeds, drunk freely, has been known to produce similar effects: but we must not infer from these cases that it is an infallible remedy for every dropsical case. We might as well expect the physician that had cured a patient of this disorder should restore to health every person that laboured

under the same complaint, and this would be as unreasonable as it is unjust to condemn the broom altogether. Dr. Withering tells us that he knew the broom succeed in curing one case that was truly deplorable; but out of a great number of cases, in which it had a fair trial, this proved a single instance. Dr. Cullen ordered half an ounce of fresh broom-tops to be boiled in a pound of water, till one half was consumed, and gave two table spoonfuls of the decoction every hour till it operated as a laxative; repeating the medicine every day, or every second day: by which some dropsies have been cured.

Cordus observes that this plant smells like the elder. This may be the cause why most cattle reject it. We observe that flies avoid both of these plants. Thompson alludes to the fondness which kine show for broom fields, which they frequent much during the summer heat, probably for the sake of brushing off the swarms of flies with its tough yielding branches. In Guienne and Auvergne, the people eat the blossoms of the broom in salads; and in this country the tender tops have been used as a substitute for hops in brewing.

have seen some beautiful cabinet goods with this wood, which, when old,

obtains a sufficient size for that purpose, for which it is a most ornamental material.

The species of broom we have noticed may be raised by sowing the seeds in the spring in common earth.

We have observed that the Spanish broom grew to the greatest height where it had not been transplanted. In one instance, where we dropped the seed in a rich soil, it grew to the size of a common laburnum in a few years, and was little inferior to that tree in beauty, and was ornamental to the shrubbery when the yellow tresses of the laburnum had ceased to shine.

The white flowering broom being more tender, should have a warm and sheltered situation.

Evelyn recommends the cultivation of broom, and says, "This is another improvement for barren grounds, and saver of more substantial fuel: it may be sown English, or (what is more sweet and beautiful,) the Spanish with equal success. In the western parts of France, and with us in Cornwall, it grows to an incredible height."

CEDAR OF LEBANON. — PINUS CEDRUS.

*Natural order, Coniferae. A genus of the
Monœcia Monadelphica class.*

—“ Cedars here,
Coeval with the sky-crown'd mountain's self,
Spread wide their giant arms.” MASON.

“No more the cedar to the turban bends ;
For us th' imperial tree from Lebanon descends.”

ERE we repine at the losses which time and circumstances have made in our fortunes or our families, let us reflect on the history of the country from whence this tree first sprung, and we shall find our individual troubles and changes diminish in the comparison as a grain of sand to a mountain.

Lebanon is stripped of its forest, and the first chosen People of God are driven from their country ; the land of milk and honey is become a desert ; and Christians are scorned and persecuted on the spot where Christ taught his blessed religion. The most splendid temple that human ingenuity ever erected, is “ passed away, like the baseless fabric of a

vision," and this monument, which displayed the power and the riches of the wisest monarch that ever existed, has had its stones turned into dust, and its gigantic beams of cedar into ashes, that have flown before the wind, "leaving not a wreck behind." The biblical reader will form an idea of the ancient extent of the cedar forest, by the four-score thousand hewers which Solomon sent to hew the timber on Mount Lebanon, and it is probable that from that time Mount Lebanon never recovered the devastation then made, for "he covered the temple with beams and boards of cedar. And he built chambers against it, which rested on the house with timber of cedar. And the cedar of the house within was carved with knops and open flowers: all was cedar — there was no stone seen. And he built the inner court with three rows of hewed stone, and a row of cedar beams."

Hiram also built many palaces for Solomon, within and without the walls of Jerusalem, all of which we may conclude were formed of this favourite timber, for we read that "Solomon's house, also of the forest of Lebanon, was covered with cedar upon the beams: and the porch of judgment was covered with cedar from one side of the floor to the other. And

the great court of his palace was with three rows of hewed stones, and a row of cedar beams."

At the same time, Solomon built a fleet of merchant ships, at Tyre, which must also have thinned the forest, both of fir and of cedar. We observe Hiram's answer to Solomon is, "I will do all thy desire; concerning timber of cedar, and concerning timber of fir."

Solomon, also, celebrated the cedar in his writings which still remain; although a vestige of his gorgeous palaces is not to be found.

"His countenance is as Lebanon, excellent as the cedars."

"The beams of our houses are cedar, and our rafters of fir."

Josephus relates, that Solomon planted cedars in Judea, and the Scripture says, "he made cedars to be as the sycamore trees, that are in the vale, for abundance." Evelyn says, "he doubtless tried many experiments of this nature, none being more kingly than that of planting for posterity."

From that time, it became a custom with the Jews to plant a cedar when they had a son born, and for a daughter a pine, which at their marriage, was cut to form their nuptial bed. The cedar was considered the symbol

of constancy and purity, from its incorruptible nature and constant verdure.

Nearly a thousand years after the time of Israel's wise monarch, Virgil tells us —

“ Yet Heaven their various plants for use designs,
For houses cedars, and for shipping pines.”

We read that Sesostris, or Rameses, the most celebrated of the ancient kings of Egypt, built a vessel of cedar of two hundred and eighty cubits, which was covered with gold, both without and within. According to Lenglet, this was about 600 years before the building of Solomon's temple; but the exact epoch of Sesostris's reign seems uncertain, as Dr. Blair makes it about 133 years later. We are told, that during his reign of 59 years, he extended his dominions, by conquest, over Arabia, India, Persia, and Asia Minor. Thus encircling both the gold and the cedars within his grasp.

Amongst the wonders related as to the durability of cedar wood, it is recorded, that in the temple of Apollo, at Utica, a city of Africa, on the coast of the Mediterranean, which Cato's name has rendered celebrated, there was found timber of near two thousand years old; and at Saguntum, in Spain, there was, says Pliny, a temple consecrated to

Diana, which was stated to have been built 200 years before the destruction of Troy; and it contained a statue of the goddess formed of cedar, which had been formerly taken from the island of Zacynthus, now called Zante, by the inhabitants, when they formed the colony of Saguntus. It will be recollected, that after enduring a siege of eight months, the brave inhabitants of this city, took the terrible resolution of burning themselves with their effects, and the whole city, rather than fall into the hands of Hannibal. The temple escaped the flames, as it stood in a valley without the walls; and the cedar image of the goddess was considered too sacred, even to be touched by Hannibal.

The timber which composed the celebrated temple of Diana, at Ephesus, was of cedar. This temple, which was reckoned one of the seven wonders of the world, was 220 years in building, and may be supposed to have assisted greatly in thinning the forests of Lebanon during that period.

This temple, where Diana was worshipped with such awful solemnity, fell a sacrifice to the flames, on the night that gave birth to Alexander the Great, which was about 285 years before the temple at Jerusalem was destroyed by that horrible trade which am-

bition and revenge deem an honourable profession, because they create and encourage it.

The ancients believed, that the wood of the cedar of Lebanon was imperishable, and that it had likewise the property of preserving from corruption whatever it enclosed. They, therefore, deposited their precious manuscripts in chests made of these trees, which custom gave rise to a proverb, — to praise a work, it was said, “It is worthy of being cased in cedar.”

The ancients also drew a juice from the cedar, with which they smeared their books and writings to preserve them from rotting, which is alluded to by Horace; by means of which, it was, that Numa's books were so wonderfully preserved, as its extreme bitter would naturally keep them from worms. The Egyptians used this extract of the cedar, with other drugs, to embalm their dead bodies, believing it would make them incorruptible; and of the durability of these ancient mummies, we have of late years seen extraordinary instances.

“ See lofty lebanon his head advance,
See nodding forests on the mountains dance.”

Pope.

This sovereign of the forest appears to have been indigenous to Mount Lebanon.

only where its majestic beauties attracted the admiration of the Psalmist, who celebrated its spreading branches by his pen. "It is neither travellers nor naturalists," says Madame de Genlis, "who could have named the oak, the king of trees. The rose will be in all countries the queen of flowers; but, amongst trees, this honour belongs only to the ancient and majestic cedar."

This noble tree has a dignity and a general striking character of growth so peculiar to itself, that no other tree can possibly be mistaken for it. It is instantly recognized by its wide extending branches, that incline their extremities downwards, exhibiting a most beautiful upper surface, like so many verdant banks, which, when agitated by the wind, play in the most graceful manner, forming one of most elegant as well as one of the most noble objects of the vegetable kingdom.

The Latins called this tree *Cedrus*, from the Greek *κέδρος*, the Arabians call it *Serbin*, the Italians *Cedro*, the Spaniards *Cedro*, the French *Cèdre*:

At what exact period, or by whom, this superb tree was first introduced into this country, is yet to be discovered. Gerard, Parkinson, Johnson, and other old writers on this subject, give us the history of the cedar, but

CEDAR OF LEBANON.

do not say that they had seen it in England. Aiton makes its introduction as late as 1683, when two trees of this kind were planted in the physic garden at Chelsea, but as these trees were three feet high when planted, it is most probable that others had been previously raised in this country. It is both remarkable and remiss, that Miller should not notice these trees in his first edition of the Gardener's Dictionary, which was published in 1724, and which he compiled within the walls that enclosed these celebrated trees.

Tradition, whose marvellous accounts sometimes want correctness, tells us that Queen Elizabeth planted a cedar of Lebanon, on the north side of Hendon Place, in Middlesex. If the birth of this tree is incorrectly registered, its death is truly recorded, for it was unfortunately blown down by the hurricane that happened on the new year's day, 1779. Its height was seventy feet; the diameter of the branches was one hundred feet; the circumference of the trunk, seven feet above the ground, was sixteen feet; and at twelve feet above the ground, where it began to branch out, it measured twenty-one feet. This tree, which was supposed to be 200 years old, was perfectly sound, and thought not to have reached its maturity.

the Old Palace or Manor House, at Enfield, in Essex, there is a cedar known to be about 156 years old, which must, therefore, have been introduced prior to those in Chelsea Gardens : it was planted by Robert Uvedale, LL.D. who kept a school in the house. This tree has suffered much by time and storms particularly those of 1703 and 1793; but in July, 1821, it was sixty-four feet eight inches high, and the length of timber was sixty-eight feet and a half, the extent of the branches from N. E. to S. W. eighty-seven feet.

There is also a cedar now growing at Hil-
lington, near Uxbridge, supposed to be about 120 years old : the height of it is fifty-three feet ; the extent of the branches, from east to west ninety-six, from north to south eighty-nine feet ; the circumference of the trunk close to the ground, thirteen feet and a half ; seven feet above the ground, twelve feet and a half ; twelve feet above the ground, fourteen feet eight inches ; at the height of thirteen feet and a half, just under the branches, fifteen feet eight inches.

Archibald, Duke of Argyle, planted several of these trees at Whitton, which grew to an enormous size, and we now see them extending their horizontal branches in every part of the country, that has possessed a lover

of the grandeur of vegetable nature. They are extremely beautiful in the plantations about Dorking. Where

— “attractive is the woodland scene,
Diversified with trees of every growth.”

In his travels, the antiquarian finds in every country remarkable spots distinguished, and memorable transactions stamped on the memory by venerable trees, which cannot be removed by the whim of men so easily as monuments of marble, or statues of brass, which often travel from their sacred abodes to wherever war drives or gold leads them. How could we have ornamented our country more, than by planting our highest hills with cedars, to have commemorated the victories of the late war? The traveller would have had his mind recalled to the battle of Trafalgar, and his road pointed out by the plantation of the Nile; they would have been glorious landmarks to the British sailors, and lasting monuments of their fame, whilst the interior hills should be marked by these vegetable monuments of military fame, that would console the peasants who had lost their friends in war, and rouse them to resent any attempt at invasion.

The only relic of Dr. James Sherard's famous botanic garden at Eltham, so ele-

gantly displayed by Dillenius, is a cedar of Lebanon, which, Lyson tells us, girths nine feet, at three feet from the ground.

In the Fellows' Garden at Emmanuel College, in Cambridge, on a lawn by the side of the pond, is a cedar that was planted in the year 1730, by Professor John Martin, then a member of that college.

The cedar of Lebanon, is now much more common in this kingdom than on its ancient birth-place; yet, we must not accuse the Mahommedans of destroying these venerable trees, as they almost consider it a sacrilege to demolish a fine tree of any description. Their greatest luxury seems to be that of reclining under the shade of a tree, to enjoy their tobacco. It was remarked by Chardin, at Ispahan, in the 17th century, that the religious Mahommedans chose rather to pray under a very old tree, than in the neighbouring mosque. "They devoutly reverence," says he, "those trees which seem to have existed during many ages, piously believing that the holy men of former times had prayed and meditated under their umbrageous shade."

The few cedars still remaining on Mount Libanus are preserved with a religious strictness. On the day of the Transfiguration, the patriarch repairs in procession to these trees,

and celebrates a festival, called the feast of cedars.

Considering whatever relates to a spot so celebrated in holy writ, must be interesting to most readers, we shall extract observations from the works of those travellers who have visited the mountains, that afforded trees so valuable that Solomon gave cities to Hiram in exchange for them. Ranwolff, who visited Lebanon, in the year 1575, saw only twenty-four trees and two old decayed ones. "We found ourselves," says he, "upon the highest point of the mountain, and saw nothing higher, but only a small hill before us, all covered over with snow; at the bottom whereof the high cedar trees were standing; and though this hill hath in former ages been quite covered over with cedars, yet, they are since so decreased, that I could tell no more than twenty-four that stood round about in a circle; and two others, the branches whereof are quite decayed by age. I also went about in this place to look out for some young ones, but could find none at all." Maundrell, who journeyed there on the 9th of May 1696, could only reckon 16 large trees, but he found several small ones. This author says, "Having gone for three hours across the plain of Tripoli, I arrived at the

foot of Libanus; and from thence, continually ascending, not without great fatigue, came in four hours and a half to a small village, called Eden, and in two hours and a half more to the cedars. These noble trees grow amongst the snow near the highest part of Libanus, and are remarkable as well for their own age and largeness, as for those frequent allusions made to them in the word of God. Here are some of them very old and of prodigious bulk; and others younger of a smaller size; and the latter are very numerous. I measured one of the largest, and found it twelve yards six inches in girth, and yet sound, and 3 yards in the spread of its boughs. At about five or six yards from the ground, it was divided into five limbs, each of which was equal to a great tree." "What Maundrell has related," says Mr. Miller, "was confirmed to me by a worthy gentleman of my acquaintance, who was there in the year 1720; with this difference only, that in measuring the branches of the largest tree, he found them to be twenty-two yards in diameter. The traveller, Le Bruyn, counted about thirty-five or thirty-six remaining on Mount Libanus when he was there; and would persuade us, it was not easy to reckon

their number, as is reported of the stones of our Stonehenge, on Salisbury Plain.

Nature, who has not neglected to form her lowest vegetable works suitable to the situations where they are scattered, has displayed, in the formation of the cedar, a wisdom that excites the admiration of all naturalists. This noble tree sends forth the lower part of its branches in an upward direction, to convey the rain water by these slopes to the trunk, and from thence to the roots; which otherwise could not receive sufficient moisture, whilst the extremities of the branches bend downwards, that the snows, in the region of which it takes delight to dwell, may slide from its foliage. The cones of this stately tree are endowed with a peculiar mode of sheltering their parts of fructification, for at their season of flowering they bend to the earth; but when they are fecundated, they turn erect towards heaven, to mature their seed; and it is then a most beautiful object to look down upon, as those must acknowledge who have mounted the artificial hill in the Jardin des Plantes, to behold the cedar which Mons. Buffon planted below. The cedar is placed, by Linnæus, as well as the larch, in the same genus with the firs and pines; it

agrees with the former in its foliation, with the latter in being evergreen.

It is pretended that these trees purify the air by their effluvia: the wood, when made into wardrobes or chests, certainly preserves clothes from insects, which are generally found to avoid perfumes and bitter wood. We are told that its smell inspires worshippers with a solemn awe, when used in wainscoting churches or chapels. It may possibly have this effect on the Hebrews and the Catholics, who are accustomed to burn incense in their religious ceremonies; and the Protestant, when he meets with this timber in a place of worship, naturally has his mind carried back to the first temple that was erected to the true God.

“It is matter of surprise to me,” says Miller, “that this tree has not been more cultivated in England, since it would be a great ornament to barren bleak mountains, where few other trees will grow so well, it being a native of the coldest parts of Mount Libanus, where the snow continues great part of the year. From the observations I have made of the trees now growing in England, I find that such as have been planted in a strong, rich, loamy earth, have made a poor progress, in comparison with those which have grown upon a stony meagre soil.”

We have frequently seen this native of Lebanon planted by those who could not have read or recollected the Psalm, "They shall spread their branches like the cedar tree." For on the banks of the Thames it is frequently seen as near the dwelling as to give the idea of the good old-fashioned piece of furniture, called a dumb-waiter; and it has frequently had its branches lopped off to let light into the eating-parlour; although it is known, that this tree suffers more by cutting and lopping than most other resinous trees. A court dress in a country fair is not a greater burlesque than a cedar of Lebanon in a lawn of forty feet, for the majesty of the tree demands an open, if not an elevated situation: its beauty consists in its formation, which is lost when cramped in its growth. That it is not particularly slow in its increase, will be seen by the progress the cedars in Chelsea gardens had made, which, in the year 1766, measured twelve feet and a half in girth, at two feet above the ground, and their branches extended more than twenty feet on every side their trunks; which branches, though they were produced twelve or fourteen feet above the surface, did at every termination hang very near the ground, and thereby afford a

goodly shade in the hottest season of the year.”

The cedar of Libanus is now so well naturalized in this country, that the seeds not only ripen but propagate themselves without care or trouble, and it has been observed that they produce and ripen their cones better in hard winters, than in mild ones ; which should induce us to plant them on those poor cold hills, where but few other vegetables would grow. Evelyn earnestly recommended them to the planter's attention, and informs us, that he received cones and seeds of the few remaining trees on Libanus; and adds, “ why they should not thrive in old England, I know not, save for want of industry and trial.” It is now ascertained that they will prosper in this climate, as well as our native oak ; and we hope they will spring up from these hints, that future generations may see them more frequently, for every age must increase the reverence due to these celebrated trees.

CHESNUT.—See *Pomarium Britannicum*.

CORNEL TREE, OR DOGWOOD.—*CORNUS*
SANGUINEA; AND
 CORNELIAN CHERRY.—*CORNUS*
*MASCU*LA.

Natural order, Stellate. Caprifolia, Juss.
A genus of the Tetrandria Monogynia class.

——— “His cornel spear
 Ulysses wav’d, to rouse the savage war.”
Odyssey, book xix.

“Fic’d in the wound th’ Italian cornel stood.”
Æneis.

It is to the lines of these matchless poets that we are indebted for much curious information relating to the use the ancients made of the different trees and shrubs. Virgil further informs us,

“The war from stubborn myrtle shafts receives;
 From cornels jav’lins; and the tougher yew
 Receives the bending figure of a bow.”

Georg. ii.

The *Æneis* informs us that the murder of the youthful Polydore was discovered by the shafts and lances with which he was slain

having taken root in his corpse, and sprung into their native myrtles and cornels:—

“ When Heaven had overturn’d the Trojan state,
And Priam’s throne, by too severe a fate;
When ruin’d Troy became the Grecian’s prey,
And Ilium’s lofty towers in ashes lay;”

Æneas and his followers land in Thrace, where they are about to offer a bull on Jove’s imperial altar —

“ Not far, a rising hillock stood in view:
Sharp myrtles on the sides, and cornels grew.
There, while I went to crop the silvan scenes,
And shade our altar with their leafy greens,
I pull’d a plant—with horror I relate
A prodigy so strange and full of fate—
The rooted fibres rose, and from the wound,
Black bloody drops distill’d upon the ground!
Mute and amaz’d, my hair with terror stood;
Fear shrunk my sinews, and congeal’d my blood.”

“ A groan, as of a troubled ghost, renew’d
My fright, and then these dreadful words ensued:
‘ Why dost thou thus my bury’d body rend?
O! spare the corpse of thy unhappy friend!
Spare to pollute thy pious hands with blood;
The tears distil not from the wounded wood;
But every drop this living tree contains
Is kindred blood, and ran in Trojan veins.
O! fly from this unhospitable shore,
Warn’d by my fate—for I am Polydore!’ ”

Pausanias, a celebrated historian of the second century, tells us there was a festival

celebrated in honour of Apollo, at Lacedæmonia, called *Cornus*, which was instituted to appease that god, because the Greeks had incurred the displeasure of Apollo, by cutting the cornel trees which grew in a consecrated thicket, at Mount Ida.

Sacred woods and consecrated groves were attached to most of the temples of the ancient heathens, and this superstition was preserved a long time after the fall of paganism. In ignorant ages these woods were the terror of the timid, the refuge of the crafty, and the grave of the credulous. In their dreadful ceremonies (for humanity forbids our calling them religious customs), human sacrifices were offered in their horrid worship. The ancient inhabitants of the north had priests who followed this infamous practice, until Christianity happily spread its soft beams over these unhappily deluded people.

Near the temple of Upsal, in Sweden, there was a wood of this description, called the Forest of Odin, which was generally full of the dead bodies of victims, which at certain seasons were taken down from the trees to be burnt in honour of *Thor*, or the sun.

Leonard Rubenus, a German, who became a priest in 1596, having received an order from his superiors to go to Dorpat, a city of

Livonia, found on his way the sacred wood of the Esthonians, where there was a large pine loaded with trophies. He was told that the inhabitants of the country adored this tree; that women newly delivered brought offerings there, and that the men refreshed its roots with beer. Rubenus wished to cut down this tree, to get rid of so ridiculous a superstition; but the Esthonians told him, that if he had the temerity to pass under it, both himself and his horse would be taken up in the air. However, Rubenus cared them of this superstition, without violence to himself or his horse; and we hope that the present mode of education will not only banish superstition, but also all those cruel and ignorant animosities which have, in different ages, so highly disgraced both the catholic and the protestant Christians.

But to return to the tree whose branches afforded the ancient butchers javelins, as it now furnishes the modern ones with skewers. The Latin name of *Cornus*, is after the Greek *κράνεια*; or from *cornu*, a horn; because the wood is of a hard and horny nature. The surname of *Sanguinea* was given to this shrub from the beautiful red colour of its young branches, which shine, during the winter months, as beautifully as conspicuously, when

planted between laurels or other evergreens; and although its small umbels make no very gay appearance by their greenish-white petals, which open in June, and often again in October, yet the variety of red, yellow, and umber tints which its foliage affords in the autumn, fully compensates for any want of splendour in its blossoms.

The English names of this shrub, are scarcely less numerous than the tints of its leaves. It is often called female cornel, to distinguish it from *cornus mascula*, and hound's berry-tree, hound's-tree, dog's berry-tree, (because, says Parkinson, the fruit is not even fit for the dogs); and, from hence, it has the name of dogwood. It is called prickwood, from its use in making skewers. Gerard tells us, "that in the north of England, it was known by the name of gaten-tree and gater-tree."

The *cornus sanguinea* abounds in most hedge-rows and copses, where the soil is of a calcareous nature. It sends out abundance of suckers, and as it branches out close to the ground, it frequently propagates itself by layers. The fruit may more properly be styled an umbilicate drupe, than a berry. It ripens in August, and is of a purple so dark,

as almost to approach to black. The pulp is soft and bitter; the stone is round and of a bony substance, divided into two cells, each of which contains a white kernel or seed. Our nurserymen have introduced seven different species of dogwood from America, which they often engraft on the common dogwood. The *cornus alba* is very similar to the common cornel shrub, excepting that the fruit is white. It is a common plant in all Siberia. The seeds were first sent by Professor Ammann, of Petersburg, to England; but it was first discovered by Gmelin, and afterwards was found by Messerschmidt, near Kamschatka.

“Our common dogwood,” says Evelyn, “is like the cornel for compactness, and is made use of for cart timber and rustic instruments, for mill-cogs, spokes, bobins, for bone-lace, and the best of tooth-pickers and butchers’ skewers. Being hard and even, it is fit also for the turner. In some countries abroad, they extract an oil from the berries for lamps, by boiling them in water and pressing them.”

In placing this shrub in the plantation, it should be recollected, that it seldom exceeds from ten to fifteen feet in height, and that its branches contrast well with any evergreens; monthly its crimson sprays are not less orna-

mental during the winter months, particularly when mixed with the common laurel.

The fruit of the *cornus sanguinea* is very bitter, styptic, and gives a pretty deep red colour to blue paper.

The cornelian cherry, *cornus mascula*, is now removed from the orchard to the shrubbery; but in this latter situation, it is at present so seldom seen, that many persons do not even know that this beautifully transparent fruit exists, which flourished in the earliest English gardens, graced the deserts of our forefathers, and furnished their dames with fruit for tarts, rob, and marmalade.

Tusser, who wrote in Queen Mary's time, calls them cornet plums. Gerard says, in 1596, "the male cornell-tree groweth in most places of Germanie without manuring; it groweth not wilde in England; but yet there be sundrie trees of them growing in the gardens of such as loue rare and dainty plants, whereof I haue a tree or two in my garden."

Lord Bacon frequently speaks of them amongst the fruits of his day, by the name of cornelians.

Pliny speaks of this fruit in a manner that induces us to think, that he considered it as indigenous to Italy as well as Austria. He

describes this tree in the 40th chapter of his 16th book; and says, he cannot rank it amongst timber trees, as it does not arrive at any great size; but that the wood of this tree was nearly equal to iron for making pins and wedges to cleave wood. It was also used by the Romans, for making spokes to their wheels.

The growth of the cornel tree, *mascula*, is so slow; that it requires fifteen years to attain ten feet in height; from hence, its wood is very hard. In the south of France it is often used for props in the vineyards, and also to make hoops for wine casks. The finest trees of this kind which we have seen in England, are at Cowfold, in Sussex, on an estate belonging to John Wood, Esq. of Chestham. One of these trees is in the garden belonging to a farm called Walhurst, in the occupation of Mrs. Dowlan; the other is in a garden of a neighbouring farm occupied by Mr. West. These trees are the size of a moderate cherry or apple tree; and we conclude they are of a considerable age, as their appearance has not altered much since we have known them, which is upwards of thirty years. They are abundant and regular bearers.

The flowers appear before the leaves, and sometimes as early as the beginning of February. They grow on umbels, of from

fifteen to thirty flowers each, of a small size and yellowish colour, and therefore make no great show; but the fruit, which is a drupe that ripens in August, has a very fine effect, as it hangs like so many cornelian drops from the branches; and it is as transparent as the stone of that name, or as the jelly of red currants, and about the size and form of a small olive.

The stone is oblong, pointed at one end, and rather larger than a grain of wheat. The pulp, which forms what is vulgarly called the fruit, is less juicy than the cherry, but more so than the plum. Its flavour is peculiar; but to some persons this sweet and astringent taste is extremely agreeable. Formerly, it was preserved and sold in the shops as *rob de cornis*; it was also pickled in salt and water in its green state, as a substitute for olives; and we find, from Pliny, that the Romans had the same practice.

Dr. James says this fruit is cooling, drying, and astringent, strengthens the stomach, and is good in fevers; especially if attended with a diarrhoea. It gives as lively a red to blue paper as alum; which gives us room to think, that it contains a salt analogous to it. An electuary was formerly made of the strained pulp for a dysentery.

CYPRESS TREE. — CUPRESSUS OF PLINY,
AND THE CYPARISSUS OF VIRGIL AND OVID.

*Natural order, Coniferæ. A genus of the
Monœcia Monadelphica class.*

“ I was exalted like a cedar in Libanus, and as a cypress-tree upon the mountains of Hermon.”

Ecclesiasticus, xxiv. 13.

—— “ Et toi, triste cyprès,
Fidèle ami des'morts, protecteur de leur cendre,
Ta tige, chère au cœur mélancholique et tendre,
Laisse la joie au myrte et la gloire au laurier.
Tu n'es point l'arbre heureux de l'amant, du guerrier,
Je le sais; mais le deuil compatit à nos peines.”

THIS tree, which is the symbol of eternal sorrow in all the civilized countries of Europe, is also the funeral tree of the east, from the Persian Gulf to the Caspian Sea; and it is likewise dedicated to the dead from Mazenderan to Constantinople, as well as to the utmost bounds of China's fruitful shores.

If we look so far back as even to the destruction of Troy, we shall find

“ In mournful pomp the matrons walk the round,
With baleful cypress and blue fillets crown'd,
With eyes dejected, and with hair unbound.”

Æneis, Book iii.

Fable informs us, that this emblem of grief owes its name to Cyparissus, a beautiful youth, who was the favourite of Apollo —

“ Whose hand adapts with equal skill, the strings
To bows with which he kills, and harps to which he
sings.”

Cyparissus having accidentally killed a favourite stag of Apollo's,

“ Much was the beast by Cæa's youth caress'd,
But thou, sweet Cyparissus, lov'dst him best.”

The youth could not be cured of his sorrow —

“ Himself he would have slain through desp'rate grief.
What said not Phœbus, that might yield relief?
To cease his mourning he the boy desir'd,
Or mourn no more than such a loss requir'd.
But he incessant griev'd. At length address'd
To the superior powers a last request;
Praying, in expiation of his crime,
Thenceforth to mourn to all succeeding time.

And now, of blood exhausted he appears
Drain'd by a torrent of continual tears.
The fleshy colour in his body fades,
And a green tincture all his limbs invades.
From his fair head, where curling locks late hung,
A horrid bush, with bristled branches sprung;
Which, stiff'ning by degrees its stem extends,
Till to the starry skies the spire ascends:

Apollo sad look'd on, and sighing cry'd,
Then be forever what thy pray'r imply'd:
Bemoan'd by me, in others grief excite,
And still preside at ev'ry fun'ral rite.”

OVID, Book x.

Claudian tells us, in his admirable poem of the Rape of Proserpine, that when Ceres decided to travel over the earth in search of her daughter, she hastened to Etna, to prepare the torch which was to light her on the road during the night; and that having rooted up two gigantic cypresses, the goddess threw them into the crater of that mount, which, being inflamed by the sulphur, augmented the fires of Etna; and from thence the ancients, we presume, dedicated this tree to Pluto and Proserpine. The Romans placed a branch of the cypress tree before their dwellings when any one died, which remained as long as the corpse was in the house; and which it then accompanied to the funeral pile, or the tomb.

Lucan, who wrote about the middle of the first century, informs us that the cypress was then only used at the funerals of persons of distinction. He says,

Et non plebeios luctus testata Cupressus.

“And the cypress testifying no vulgar grief.”

“The mournful cypress rises round,
Tap’ring from the burial ground.”

Lib. ii.

The Turks of the present day attend most religiously to the planting of the cypress tree at the tombs of their departed friends and re-

latives; and they are always careful to select the upright variety, as the spreading cypress would, in such situations, be the cause of great sorrow to them, from their belief that when the tree grows with a spiral point towards heaven, it indicates that the soul of their friend is ascended into the regions of bliss. The Armenians are not allowed to plant a cypress tree at the graves of their deceased friends, but they are permitted to plant any branching tree, as the apple, oak, or elm, &c.; which, from its crooked branches, indicates, as the Mahomedans affirm, the impossibility of the ascension of Christian souls. When will reason ascend her universal throne!

Lady M. W. Montagu mentions a cypress tree in a garden at Kujuk Checkmedji, that was converted to rather a singular use. "The house and garden now belong," says her Ladyship, "to a *hogia*, or schoolmaster, who teaches boys here. I asked him to show me his own apartment, and was surprised to see him point to a tall cypress tree in his garden, on the top of which was a place for a bed for himself, and a little lower one for his wife and two children, who slept there every night. I was so much diverted with the fancy," says Lady Mary, "that I resolved to examine his nest nearer; but going up fifty steps, I found I had still fifty to go up, and then I must climb from

branch to branch with some hazard of my neck. I thought it therefore the best way to come down again."

Cato wrote more on the cultivation of the cypress than on that of any other tree; and he calls it a Tarentine tree; but Pliny says, that was from its being first planted in that neighbourhood, and that the isle of Candia is its natural country; where, he says, when the ground is ploughed up, the young plants are sure to appear, and that in many parts of that island, the cypress trees spring up without culture; particularly on Mount Ida, on which they grow to the very point, although it is continually covered with snow. Hanway says, some of the mountains near Reshd, in Persia, are covered with cypress trees. Thus, like the cedar, its birth-place is a cold bleak mountain; and, like that majestic tree, it lives almost to eternity, and its timber seems nearly imperishable. Sir W. Ouseley tells us, in his travels, that "the beautiful and venerable cypress of Fassa has been the boast and ornament of that city for above a thousand years." Pliny speaks of a cypress that was planted when the foundation of Rome was laid, and which fell, he says, through careless neglect, on the last year of Nero's reign. The same author tells us, the famous statue of Vejovis, Jupiter, in the capitol, was

made of cypress wood; and that when he wrote it was perfectly sound, although it had been dedicated and consecrated to the temple since the second year of the foundation of Rome. Theophrastus, who calls this tree *Κυπαρίστος*, tells us, that the doors of the celebrated temple of Ephesus were formed of this durable wood; and every body knows that the doors of St. Peter's church, at Rome, were framed of cypress timber, which lasted from Constantine to Pope Eugenius IV.'s time, which was eleven hundred years, and were then sound and entire, when the pope took them down to change them for bronze gates. The Egyptians kept their mummies in chests of cypress wood; and Thucydides, a Greek historian, who wrote about 400 years before the birth of Christ, tells that the Athenians used to bury their heroes in coffins formed of this timber; and Aristocles, the celebrated Athenian philosopher, (who was called Plato, from the largeness of his shoulders), and who flourished about the same time with Thucydides, would have the laws and sacred rites inscribed on tablets of cypress wood in preference to brass.

The Babylonian history affirms, that the lasting bridge, which Semiramis caused to be built over the Euphrates, about 1960 before

the Christian era, was entirely formed of this timber; and some learned writers, who do not hesitate to go 389 years farther back, endeavour to prove, that the gopher mentioned in Scripture as the wood of which the ark was built, was no other than cypress, and which is not confuted by other learned authors; such as Isa, Vossius, and David Kinchi, who will have gopher to signify only resinous timber. Epiphanius, a bishop of Salamis, who died A.D. 403, tells us, (Hæres. lib. i.) some relics of the ark, *circa campos Sennaar*, lasted even to his days; and which was judged to have been of cypress. It is known, that at Crete this timber was employed in building the largest ships; and Virgil tells us, “that cypress provides for keels of ships that scour the watery plains.” Aristobulus affirms; that the Assyrians made shipping of this timber; and so plentiful was this tree about those parts of Assyria, where the ark is conjectured to have been built, that those vast armadas which Alexander the Great caused to be equipped and sent out from Babylon, consisted only of cypress. — (Arrianus, Alex. lib. vii., and Strabo, lib. xvi.)

The ancients, who had great faith in balsamic scents, supposed therefore that the cypress tree improved the air by its transpir-

ation; and on which account, the eastern physicians sent all those who had pulmónic disorders to the Isle of Candia, where these trees abound; and we are assured, that the aromatic smell of this evergreen was found to be a specific for the lungs. This subject deserves minute investigation, and the serious opinions and consultations of those

“ Men who suppress their feelings, but who feel
The painful symptoms they delight to heal.”

It is clearly ascertained, that trees correct a putrid bad air. It should, therefore, be our study to find out those that do it most powerfully; and having ourselves so often been revived and refreshed by the natural perfumes of the garden and fields, we deem it worthy the labours of medical students, to learn how far aromatic and balsamic scents may be good for those who are troubled with weak lungs. We have no hesitation in saying, it must be beneficial to hypochondriacs. In making these observations, we hope the learned Esculapians, whom we venerate as much as we despise those

“ Who to contention as to trade are led,
To whom dispute and strife are bliss and bread,”

will not deem us a disciple of those advertising

quacks, who have the impudence to tell us,
they have

“ Men snatched from graves, as they were dropping in,
Their lungs cough'd up, their bones, pierc'd through
their skin :

Their liver all one schirrus, and the frame

• Poison'd with evils which they dare not name ;

Men who spent all upon physician's fees,

Who never slept, nor had a moment's ease,

Are now as roaches sound, and all as brisk as bees.”

“ How strange to add, in this nefarious trade,

That men of parts are dupes by dunces made !”

CRABBE.

By whom the cypress tree was first introduced to England, and at what exact period, we are not able to learn ; but it is probable, that we are indebted for this celebrated tree to some pious abbess, or holy fathers of Sion Monastery, near Brentford, which is now become Northumberland's ducal palace ; as Dr. Turner tells us, in his Herbal of 1568, “ it groweth right plenteously in the gardine of Sion.” Gerard notices, in 1597, that “ it groweth likewise in diuers places of Englande, where it hath beene planted, as at Sion, a place near London, sometime a house of nunnes ; it groweth also at Greenwich, and at other places ; and likewise at Hampsteed, in the garden of Master Waide, one of the clarkes of hir maiesties privy-counsell.”

Evelyn says, in 1664, "the cypress tree was, but within a few years past, reputed so tender and nice a plant, that it was cultivated with the greatest care, and to be found only amongst the curious; whereas we see it now in every garden, rising to as goodly a bulk and stature as most which you shall find even in Italy itself." For such I remember to have once seen in his late Majesty's gardens at Theobalds, before that princely seat was demolished." The author of the *Sylva* strongly recommends the planting of this tree in England; and of its hardiness he says, "The March and April winds (in the years 1663 and 1665), accompanied with cruel frosts and cold blasts, for the space of more than two months, night and day, did not, amongst near a thousand cypresses growing in my garden, kill above three or four, which, for being very late cut to the quick, (that is, the latter end of October), were raw of their wounds, took cold, and gangreened." From this and other recommendations of Evelyn, we presume it became fashionable to cultivate the cypress, for in 1706, when London and Wise published "*The Retired Gardener*," they say, "cypress was formerly more in fashion than 'tis now; for we see in some places whole alleys of it; but these trees being apt to take but one sort of figure,

which is that of a pyramid, and the yew tree and piéca being more proper for the variety of forms of which they are susceptible, to adorn gardens, cypress has lately been neglected, and the other two trees been more planted." Thus it is evident that the cypress was driven out of the garden by the shears, whose business it was to disfigure nature, by transforming evergreens into urns, sugar-loaves, extinguishers, and a thousand other whimsical devices, as suited the taste of the owner, or the ability of their gardeners, who have not been improperly called evergreen tailors. But the cypress may now safely return to its station in our plantations, since the shears have left the grove, and are now as busily employed in disfiguring the human shape, as they were formerly in mutilating vegetable beauties.

There is no part of ornamental planting more difficult than the distribution of evergreen trees, which are either the most permanent beauties of the grove, or the most gloomy features, accordingly as they are dispersed. A plantation composed entirely of trees that are not deciduous, has an aspect so sombre, that the name of nevergreen may be more properly applied to them than that of evergreen; yet they cheer our winter scenes most beautifully when happily blended with

those deciduous trees, whose colour and character assimilate best with them. But we are not admirers of that regularity and uniformity so often offensive to the eye in large plantations, where there is no deviation from the fir and the larch, unless where death has made a gap, when you are treated with a larch and a fir through hill and dale to the end of the plantation.

The cypress seems admirably adapted to ornament those lawns which surround villas or lodges built in the Grecian style, and perhaps we have no tree that accords so well with stone or stuccoed edifices as the cypress; and even the temples of marble lose half their effect if surrounded by other buildings instead of being relieved by the foliage of trees. At the present time, the burial hill of Père-lachaise, near Paris, forms a most interesting picture, as the numerous and various formed monuments rise above the young arbores vitæ and cypresses, like a city of marble emerging from a forest, and from which, a friend observes, we may form a faint picture of the beautiful appearance of Constantinople from the Bosphorus; the hills on which that city stands being intermixed with white buildings and green foliage, which forms a spectacle not equalled in any other part of Europe.

We have two varieties of the common cypress, *sempervirens*, the upright and the spreading, which the ancients distinguished as male and female trees; but the botanist will know by the class in which these trees are placed, that they are androgynous plants, viz. having male and female flowers on the same root. It appears that the ancients did not consider the seed of a tree to be a fruit, unless it was eatable; for Phocion, who was so celebrated in Athens for his private and public virtues, remarked to a young man who spoke with more vanity than good sense, “Young man, thy discourse resembles the cypress; it is large and lofty, and bears no fruit.” What would this Athenian, whose virtues were as incorruptible as the cypress itself, say to some of our modern speeches and publications?

When we plant the cypress in the shrubbery, it should be correctly ascertained if it is the spiral or the spreading variety; for the former requires but a small space, and should be placed behind those flowering shrubs whose extending branches require such an addition: whilst the spreading cypress may wave its mournful branches over the daisy-pied lawn, or form a foreground to the pointed poplar. But it requires considerable ingenuity to place the cypress happily in our plantations; for in most

situations its dark and slender head adds a gloom rather than cheerfulness to the scene, particularly in autumnal evenings; when either the sun leaves its last streak, or the rising moon sends a silvery stream of light down the dark foliage, which gives additional sombre to the shade, and a spectre-like appearance to the imagination of the gloomy mind.

Mr. Miller says, "the spreading cypress is by far the largest growing tree, and is the most common timber in some parts of the Levant. This, if planted upon a warm, sandy, gravelly soil, will prosper wonderfully; and though the plants of this sort are not so finely shaped as those of the first, yet they greatly recompense for that defect by their vigorous growth and strength, in resisting all weathers. This tree is very proper to intermix with evergreens of a second size next to pines and firs, to form clumps, in which class it will keep pace with the trees of the same line, and be very handsome. Besides, the wood of this tree is very valuable, when grown to a size fit for planks, which I am convinced it will do in as short a space as oaks; therefore, why should not this be cultivated for that purpose, since there are many places in England where the soil is of a sandy or gravelly nature, and seldom produces any thing worthy culti-

vating? Now, in such places, these trees will thrive wonderfully, and greatly add to the pleasure of the owner while growing, and afterwards render as much profit to his successors, as perhaps the best plantation of oaks."

Pliny tells us, that, in Italy it was considered amongst their most profitable plantations, and was generally cut for poles once in every thirteen years, and that this fall was called *dos filia*, because the profit was reckoned a sufficient marriage portion for a daughter.

This timber is reckoned amongst the sonorous woods; it is therefore used for harps, violins, and other musical instruments, and it is said that no wood is better calculated to resist the ravages of the worm, &c.

The deciduous cypress tree, *cupressus disticha*, is a native of North America, and it appears to have been introduced to this country by Mr. John Tradescant, of South Lambeth, where it was planted prior to 1640. We have now two varieties of this species of cypress.

Cupressus lusitanica, commonly called the cedar of Goa, from whence it was first brought to Portugal, and is therefore named the Portugal cypress. We learn from Mr. Ray's let-

ters, that this species of cypress was cultivated in England as early as 1683, but it is not considered so hardy as the common cypress, and is therefore less planted; formerly there were some of these trees growing in the Bishop of London's garden, at Fulham, and there was a fine tree of this species in the gardens of the Duke of Richmond, at Goodwood, near Chichester, which was killed by the frost in 1740.

The arbor vitæ leaved cypress, or white cedar, *cupressus thyoides*, is a native of North America, and Peter Collinson, Esq. had the honour of giving it British soil in 1736. This species grows naturally in China and Cochin-China; it loves a strong moist soil, and abounds in the swamps of New Jersey, and some parts of Pennsylvania and New York.

“ The May flower and the eglantine
 May shade a brow less sad than mine:
 But, lady, weave no wreath for me;
 Or weave it of the cypress tree.”

However applicable these lines of the Scottish bard may be to us, we would not willingly sow the seeds of melancholy in any person's pleasure grounds, yet we must state that all the different species of cypresses are raised from seeds, which, Miller tells us, should be sown early in the spring on a bed of warm,

dry, sandy earth, which must be levelled very smooth, and the seeds scattered thereon pretty thick, sifting the same light earth over them half an inch thick. If the seeds are sown upon a moderate hot bed, and the beds covered with mats, they will come up much sooner, and with greater certainty, than when they are sown in the cold ground.

Le Bon Jardinier, for 1822, recommends the French nurseryman to sow the seeds in pots, which are plunged into hot-beds, as these pots can be removed into the orangery for protection during the winter. Mr. Boucher recommends the same practice ; but we should most decidedly prefer planting out not only the cypress, but all other evergreens, that have been reared in the hardiest manner that their cultivation admits of, as they are intended to decorate our walks and views in the most inclement season of the year.

The green cones of the cypress, pounded and mixed with leaver, were one of the external remedies which the ancient physicians used for scrofulous complaints. They also recommended the leaves to be pounded and applied to the wound made by the bite of serpents.

ELDER.—See *Pomarium Britannicum*.

ELM.—ULMUS.

*Natural order, Scabridæ, Amentaceæ, Juss. A
genus of the Pentandria Digynia class.*

ANCIENT fable tells us, that the vegetable kingdom owes the birth of this tree to the united melody of the lyre and the voice of Orpheus, whose harmonious complaints for the loss of Euridice gained him admittance to the dominions of Pluto;

“ *Where, while the bard melodiously complains,
And to his lyre accords his vocal strains,
The very bloodless shades attention keep,
And, silent, seem compassionate to weep.
Ev’n Tantalus his flood unthirsty views,
Nor flies the stream, nor he the stream pursues;
Ixion’s wond’ring wheel its whirl suspends,
And the voracious vulture, charm’d, attends.
No more the Belides their toil bemoan,
And Sisiphus, reclin’d, sits list’ning on his stone.*”

OVID.

On his return to earth, we are told by the poet that he retired to a verdant hill, but which was destitute of shade, where he no sooner breathed his plaintive airs or struck his

sweet-resounding strings, than the elm and other trees sprang up to give him shade.

“Themselves transplanting, all around they grow,
And various shades their various kinds bestow.”

The elm as well as the cypress was a funeral tree with the ancients of the eastern nations, because they considered them as fruitless trees, their seeds being disregarded by them. Homer tells us in the *Iliad*, that Achilles raised a monument to Ætion, the father of Andromache, around which elms were planted.

“Stern as he was, he yet rever’d the dead;
His radiant arms preserv’d from hostile spoil,
And laid him decent on the fun’ral pile;
Then rais’d a mountain where his bones were burn’d:
The mountain nymphs the rural tomb adorn’d,
Jove’s sylvan daughters bade their elms bestow
A barren shade, and in his honour grow.”

POPE.

The elm is also celebrated in the *Iliad* for having formed a hasty bridge, over which Achilles escaped the Xanthus, when that river, by its overflowing, had put him in danger of being carried away.*

The Greeks called this tree Πτελεα, *Ptelea*, therefore, from whence the Latins derived

* See the *Iliad*, book xxi. This passage, descriptive of the wrath and fury of a river god, is perhaps one of the finest in the whole poem.

their name of *Ulmus*, is uncertain; but from it the English name of *Elm* is evidently taken, as well as that of the other European languages.

The imperial city of Ulm, in Germany, owes its name to the great quantity of elm trees with which its vicinity abounds; and the Doomsday book mentions nearly forty places in this country which also took their names from this tree, and from hence Dr. Hunter conjectures that the elm is a native of England. But in this opinion we do not coincide with the learned Doctor; for the admitting that this tree was known in England as early as the Saxon times, does not prove it indigenous to the soil, so strongly as it is confuted by nature, which seldom permits it to propagate its species in this country, according to her common rules; whilst, in other countries, where the seed falls, young plants spring up as commonly as the oaks of Britain. However plentifully a plant of any description may be found in a country, we can never reconcile our minds to consider it a native of the soil where it does not spring freely from seed. We cannot, therefore, agree with those who affirm the elm to be a native plant, without contradicting the rules of nature, in considering its parts of fructification and its fruit

as unnecessary organs of the tree ; and in the works of the wise Creator nothing is found wanting or superfluous, but all is beautiful union and harmony.

We have already shown how careful the Romans were in conveying the cherry tree to this island, almost as soon as they had procured it in Italy ; and it occupied their earliest attention to enrich their own land by such vegetable productions as the countries which they visited or conquered afforded. Nor did they seem more backward in beautifying the nations subject to them in the same proportion, and although there was a superabundance of timber in this country at the time of their invasion, we know it consisted principally of oak, ash, beech, and birch, with some minor trees ; and every reader knows how religiously the Romans adhered to the superstitious customs of their ancestors, and we all know likewise how devoted most people are to the customs and habits of their country. It would not, therefore, be surprising or unlikely that they should wish to plant the elm on the graves of the heroes they lost in Britain. In all ages it has been found difficult to change the habits of the lower classes of men, and the Romans adopted particular trees for particular purposes ; and we learn from Virgil

that their husbandmen bent the young elms whilst growing into the proper shape, for their *buris*, or plough-tail.

*Continuò in silvis magna vi flexa domatur
In burim, et curvi formam accipit ulmus aratri.*

Geor. i. 170.

“ Young elms with early force in copses bow,
Fit for the figure of the crooked plough.”

DRYDEN.

But, above all, they considered the elm as the necessary support and friend of the vine; and their belief that a sympathy existed between plants was so great, that they seldom planted one without the other. The gravest of the Latin authors do not hesitate to style the elm the husband to the vine; and Pliny observes, that that elm is a poor spouse which does not support three wives. This mode of marrying the vine to the elm, gave rise to the elegant insinuation of Vertumnus to Pomona, whose story may be found in Ovid.

“ ‘ If that fair elm,’ he cried, ‘ alone should stand,
No grapes would glow with gold, and tempt the hand:
Or, if that vine without her elm should grow,
’Twould creep a poor neglected shrub below.’ ”

Tacitus states, that vineyards were planted by the Romans in Britain. They would, there-

fore, naturally introduce the elm at the same time; which, being a tree of such easy propagation, both from suckers and cuttings, a single tree introduced by them, would be sufficient to stock the whole island in a much shorter space than the time they had possession of this country.

The learned author of the "Sylva" was of opinion, that the elm was not indigenous to England. "Some affirm," says Evelyn, "that it was first brought out of Lombardy; and I have frequently doubted whether it be a pure indigene or translatitious; and not only because I have hardly ever known any considerable woods of them, but almost continually in tufts, hedge-rows, and mounds; and that Shropshire, and several other counties, and rarely any beyond Stamford to Durham, have any growing in many miles together." Aubery informed Mr. Ray, that the elm was not to be found north of Grantham or Stamford.

At the present time, when ages have so happily blended exotic and native beauties in our woods, the elm is never seen in those forests that keep their original character. It seems to have followed cultivation and enclosure, and is principally to be found in the neighbourhood where the town has been

reared; or it marks the spot where the village once stood; and the rapid manner in which this tree propagates itself in hedgerows and on banks, by suckers from its far extending roots, will easily account for the quantity now found in such situations. It must have been a happy exchange for Britannia, when she banished the wolf from her shores, and received the elm into the bosom of her woods. Our neighbouring shores are not yet entirely free from these plunderers of the fold. It was formerly the custom in France for the hunters to suspend the skins of these animals on their church-doors; but in later times, an elm was planted in their country churchyards, on which these trophies were hung; probably, with the idea, that they would deter these ravenous animals from tearing the dead bodies out of their graves, which was no unfrequent occurrence, when hunger drove them from the mountains or the forests. Long after these kinds of offerings ceased to be made, the custom of planting elms in front of village churches was preserved; and it is this tree, which still graces their cities and towns in their justly-boasted *boulevards*, under the shade of which patient industry throws the thread, and places the pin so accurately on the cushion, warbling her native airs under

this verdant roof, as happily as the wealthy dame; who, bedecked by the art of the humble lace-maker, can sing or sigh under the gayest dome of the proudest saloon.

English towns are strikingly deficient in these agreeable avenues, whose shade renders the summer promenade so agreeable, and gives such cheerfulness to the entrance of towns; for there can be no sight more pleasing to the traveller, than that of beholding the humble stalls of the little fruit-merchants, intermixed and overlooked by the knitting grandmother or netting grandfather, with here and there a seat occupied by the wounded soldier; nor is the fume of the sailor's pipe so offensive in this situation, as at the chequered door of the narrow street.

Spain owes her vistas, which are the pride of Aranjuez, Casel del Campo, Madrid, and other royal demesnes, to the union of its Philip with Mary of England; as before that period elms were not known in Spain, Philip the Second having caused them to be taken from England, and planted in his native land. The elm is an aboriginal of Barbary, as well as the south and south-east parts of Europe. Linnæus says, it is rarely to be found above Helsing and Finland.

The elms of England are scarcely less re-

marked for their age, bulk, and beauty, than the British oaks, which form alike the world's just wonder, the guard of friends, and the scourge of foes. Mr. John Ray, the botanist, mentions an elm which was felled in Sir Walter Bagot's park, in Staffordshire, that measured 120 feet in length, and was at the stool seventeen feet in diameter. When sold, its head alone produced forty-eight waggon-loads of wood to burn, and its trunk, besides sixteen blocks, furnished eight thousand six hundred and sixty feet of planks; its whole mass was valued at ninety-seven tons.

Fecunda frondibus ulmi.

VIRGIL.

Fruitful in leaves the elm.

This quality in the elm, which ensures a constant shade during the summer months, has secured it a situation in most of the public, as well as the royal, gardens of Europe. Henry the Fourth of France planted an elm in the Luxembourg gardens of Paris, which stood until the late revolution in that country levelled both tree and monarch to the dust.

“Nor could old age itself their pity reach,
No reverence to hoary barks they knew.”

Queen Elizabeth, who was contemporary with *Henri Quatre*, it is said, planted an elm

with her own hands at Chelsea, where she spent a part of her early days in a palace belonging to her father. This elm stood at the upper end of Church-lane, near the place where the turnpike now is, and was a boundary of the parish on the north side. It was felled, to the great regret of the neighbourhood, on the eleventh of November, 1745, and sold for a guinea, by the lord of the manor, who was no other than the worthy Sir Hans Sloane, which induces us to think that the tree must have become dangerous, or a nuisance to the road. It was 13 feet in circumference at bottom, and 6 feet 6 inches at the height of 44 feet: before the hard frost of 1739-40, which injured its top, it measured 110 feet from the ground. It was in the year 1600 that Sir Francis Bacon planted Gray's-inn walks with elms, eight of which were standing in the middle of the last century.

Under the shade of these trees many a virtuous and worthy man studied for the good of his country; for

“ Law was design'd to keep a state in peace;
To punish robbery, that wrong might cease;
To be impregnable: a constant fort,
To which the weak and injur'd might resort:
But *now* perverted minds its force employ,
Not to protect mankind, but to annoy:

And long as ammunition can be found,
 Its lightning flashes, and its thunders sound."

CRABBE.

In modern times

The trader, farmer, butcher, taylor, all
 Bring up a son, *Professional* ;
 And then deal out their numerous writs,
 To keep their cubs, whom this trade fits.

" Perhaps their numbers may in time confound
 Their arts — as scorpions give themselves the wound."

The walk of elms at the north side of St. James's Park, which once was the rendezvous where courtly fashion and follies were displayed, and where now indigence and vice have fixed their station, was planted in the reign of Charles the Second ; some few of the original trees were standing at the beginning of the present century. If it be true that trees have eyes and ears, how much must these venerable elms have overlooked and heard, and how fortunate will be the book-seller who has the publication of these secrets, which no doubt will shew—

" How creatures, nature meant should clean our streets,
 Have purchased lands and mansions, parks and seats."

Martyn tells us, "Two elms at St. John's College, Oxford, were sizeable trees, in the reign of Queen Mary ; and at Fulham, there

are, or were, some elms planted in the time of King Edward the Sixth; and one at Richmond, said to be planted by a courtier of King Henry VII. whilst that king kept his court there."

Madame de Genlis speaks of an elm of great size in this country; in the hollow trunk of which she says a poor woman gave birth to an infant, and where she afterwards resided for a long time. This tree, which is a great curiosity, is still standing in the village of Crawley; but as the parish is not willing to be burthened with all the young elms that might have been brought forth from the trunk of this singular tree, the lord of the manor has very wisely put up a door to the entrance of this lying-in hospital, and which is kept locked, except upon particular occasions, when the neighbours meet to enjoy their pipe, and tell old tales in the cavity of this elm, that is capable of containing a party of more than a dozen. The interior of this tree is paved with bricks, and in other respects made comfortable for those that it embarks.

In our plantations we find but few trees that excel the elm in height or beauty, particularly when it stands singly and meets a favourable soil. Its foliage then forms grand masses of light and shade in a manner so pe-

cular to itself, that we might almost fancy it a clump of green clouds, which sometimes obscure, and sometimes admit the light, showing branches distinct from the leafy clouds, which again support other masses of foliage, that forms a group of harmony not excelled in any other majestic tree.

“ Thus when we view a well-proportioned dome,
 (The world’s just wonder, and even thine, O Rome !)
 No single part unequally surprise,
 All comes united to th’ admiring eyes :
 No monstrous height, or breadth, or length appear ;
 The whole at once is bold and regular.”

POPE.

A few detached elms before clumps of pines or firs, add greatly to the beauty of the plantation, as the extreme softness of the colour of the elm leaves in the spring, and the delicate manner in which they seem sprinkled over the branches, have a delightful effect.

“ No numbers can the varying robe express,
 While each new day presents a different dress.”

The autumn changes the full green foliage of the elm to a yellow or ochre colour, which enlivens the dark tints of the fir, scarce less agreeably than its juvenile shades. This tree varies exceedingly in the colour of its foliage, as well as in the size of its leaves, by the least change of soil. Thus we often see two neigh-

bouring elms, whose roots have run into different strata, forming almost a different variety of this tree.

Linnaeus considered all the European elms as making only one species, whilst Ray and Goodyer describe four; but modern botanists distinguish only two species, and consider the other kinds as varieties of these. The common elm; *ulmus campestris*, gives out its flowers generally about the end of March, which are monopetalous, and bell-shaped, closely thrust together on the twigs or branches. They make so little show, that they would scarcely be perceptible were they not to make their appearance before the leaves come out. This species of elm does not flower until it has acquired considerable size and height. The seeds, which are not much unlike the garden arach seed in size and form, generally fall about the time the leaves come out, and few of them hang to ripen. The leaves are what botanists denominate doubly serrate, that is, with small teeth upon each of the large ones, like some descriptions of saws. The elm leaf is rough and harsh on both sides, and the leaf is remarkable for having the principal nerve not quite in the middle; therefore the branching nerves are longer on one side than the other.

The broad-leaved elm, Wich elm, or Wych

hazel, *ulmus montana*, suspends its flowers on longer peduncles, and more loosely spread out than those of the foregoing elm; and it likewise blossoms when younger than the common sort. The trunk of this kind of elm soon divides into long, wide-spreading, winged branches, but it seldom rises so high as the common elm. This kind is hardy enough to climb the steeps, and flourish in the remotest Highlands of Scotland.

“The Wich elm,” says Mr. Gilpin, in his *Forest Scenery*, “is perhaps generally more picturesque than the common sort, as it hangs more negligently; though, at the same time, with this negligence, it loses in a good degree that happy surface for catching masses of light, which we admire in the common elm.”

The Dutch elm, *ulmus suberosa*. This variety was brought from Holland at the beginning of King William’s reign. The leaves of this elm are large, but the timber is of a very inferior quality to our common elm.

Of the American elms cultivated in this country, the *Hortus Kewensis* notices three varieties; the first of which was introduced or planted by Mr. James Gordon, in 1752, who also cultivated the hornbeam-leaved elm, in 1760, which is also a native of North America, as well as the drooping elm, which takes

its name from the pendant position of its branches, and is also distinguished by its smooth oblong leaves.

Columella tells us, that the Romans fed their cattle with the leaves of the elm ; for which purpose, Evelyn says, they are not to be despised ; for being suffered to dry in the sun, on the branches, and the spray stripped off about the end of August, these he directs to be placed in a dry barn, and says, when hay and fodder is dear, they are of great service, and that the cattle will eat them in preference to oats, and thrive exceedingly well with them. But since the introduction of clover, and other exotic grasses and plants so abundantly into our fields, the trees are but rarely robbed of their verdure to feed our cattle : yet we are surprised not to see the fallen leaves collected in the autumn, since every gardener knows that no manure is superior to decayed leaves.

We learn from the plays of M. Accius Plautus, that elm twigs were anciently used as instruments of castigation ; for this comic poet speaks of a rogue who had been chastised so often, that he had wasted all the elms in the country, in rods and cudgels.

Elm timber is in great esteem for pipes that are constantly underground ; and it is in-

calculable what a quantity of these trees were swallowed by the numberless streets of our monstrous capital before iron pipes were placed in its stomach; and which, together with substituting that metal instead of elm for our last habitations, must be the means of making elm timber more plentiful for other purposes.

Captain Woodrooffe's Journal informs us, that the greater part of the Persian vessels are built of elm timber, which abounds in the province of Peribazar.

Evelyn says in his *Sylva*, "Elm timber is of singular use; especially where it may lie continually dry, or wet, in extremes; therefore, proper for water-works, mills, the ladles and soles of the wheels, pipes, pumps, aqueducts, pales, ship-planks beneath the water-line, &c. &c. A second-rate charcoal is made from this wood, and rails and gates of elm, thin sawed, are not so apt to rive as oak."

It has scarcely any superior for kirbs of coppers, feather edge, and weather boards; but it does not without difficulty admit the nail, without boring. His Grace, the Duke of Devonshire planted 54,143 young elms on his estates between the years 1816 and 1819.

It was much more common formerly than at present in the southern counties of England, for weather boarding the sides of barns,

stables, and even dwelling-houses for the farmers ; but many of these were exchanged for buildings of brick and stone, during the long war, which dazzled all eyes with a deceptive prosperity, whilst it ate away the substance of the country like a polypus in the flesh.

Medical writers have not been sparing of their commendations of the virtues of the elm, every part of which, from the root to the leaf, was esteemed a sovereign remedy for some complaint ; but our space will not allow us to publish all the secrets of Theophrastus, Dioscorides, Galen, Pliny, Matthioli, Bauhine, Ray, and a long list of other writers, who have recorded the cures performed by means of the elm. We fear that a greater number of their patients were boxed up in the planks of this tree, than were cured by its bark.

The elm leaves are often found with blisters on them, occasioned by the pricking of insects, and include a viscous juice, called elm water, which we should not have mentioned as being good for recent wounds and bruises, but we find the fair sex of former days used it to wound mankind, as an old writer assures us that it was with this wash that they “ brightened the skin of their faces, and made their countenances so amiable.”

All the varieties of the elm may be raised

from seeds, or propagated by layers or suckers taken from the roots of the old trees. We have lately seen elms of a considerable size transplanted, but they seldom make much new wood; and younger trees soon produce a better shade, and outrun the older plants, particularly if little trenches be dug near the roots to hold the rain water, that will greatly facilitate their growing in dry summers, and retain their verdure much longer. We observed this practice and its advantages in many new-formed boulevards and plantations of elms in the vicinity of Paris, where this tree is not less a favorite than in the environs of London, as the following beautiful lines of Gresset will shew : —

Feuillage antique et vénérable,
 Temple des bergers de ces lieux,
 Orne heureux, monument durable
 De la pauvreté respectable,
 Et des amours de leurs aïeux ;
 O toi ! qui depuis la durée
 De trente lustres révolus,
 Couvres de ton ombre sacrée
 Leurs danses, leurs jeux ingénus ;
 Sur ces bords, depuis ta jeunesse
 Jusqu'à cette verte vieillesse,
 Vis-tu jamais changer leurs mœurs,
 Et leur félicité première
 Fuir devant la fausse lumière,
 De nulle brillantes erreurs ?
 Non. Chez cette race fidèle,

Tu vois encor ce pur flambeau
De l'innocence naturelle,
Que tu voyois briller chez elle.
Lorsque tu n'étois qu'arbrisseau.
Et pour bien peindre la mémoire
De ces mortels qui t'ont planté,
Tu nous offres pour leur histoire,
Les mœurs de leur postérité.
Triomphe, règne sur les âges,
Echappe toujours aux ravages
D'Eole, du fer et des ans ;
Fleuris jusqu'au dernier printemps,
Et dure autant que ces rivages.
Au chêne, au cèdre fastueux,
Laisse les tristes avantages
D'orner des palais somptueux ;
Les lambris couvrent de faux sages,
Tes rameaux couvrent des heureux.

FIR-TREE. — PINUS.

*Natural order, Coniferae. A genus of the
Monæcia Monadelphica class.*

“ Yon verdant pines, that midst the winter smile,
Offspring of Scotia or Virginia’s soil,
The world’s extremes within their branches join’d,
To either hemisphere convey thy mind.”

DE LILLE.

——— “ Towering firs in æonic forms arise,
And with a pointed spear divide the skies.”

PRIOR.

IT is not only in the countries of the north, but also on the summits of eastern mountains, that the fir and the pine-tree rear their heads without the aid of man. We have already noticed, that the forests of Lebanon were composed of firs as well as cedars. “ I will do,” said Hiram to Solomon, “ all thy desire, concerning timber of cedar and timber of fir.”

The allwise Providence, who scattered the palms over the torrid zone, giving the coconut-tree to the sea-shore, and the date to desert

rocks and sands, has with the same wisdom allotted the fir and the pine their dominion on those bleak and elevated mountains, which attract the snows to their summits, in order that the valleys may be refreshed by their descending streams.

Every part of these trees displays infinite wisdom in their formation, which is so peculiarly adapted to their native mountains. The resinous juices, with which their trunks and branches abound, defy the rigour of the frost to congeal the sap, whilst the filiform nature of the leaves of these evergreen trees are not less happily adapted for resistance to the impetuosity of the winds, that beat with such violence on elevated situations. As these trees were designed by nature for perpetual winter, their foliage possesses the farther advantage of reverberating the heat, like the hair of animals.

The Swedish naturalists have observed that the fattest pines are to be found on the dryest and most sandy regions of Norway; and Mathiola, in his useful commentary on Dioscorides, informs us that there is no substance more proper than the charcoal of those trees for prompt melting the iron minerals, in the vicinity of which they peculiarly thrive. The closeness of their foliage shelters the

mountaineer from the snow, whilst their branches furnish him with fuel and torches.

The fruit or seed of these trees is so wonderfully protected by the formation of their cones, against the inclemency of the weather, that man evidently first borrowed from them the idea of placing shingles, tiles, and slates to the roofs of his dwellings.

From the class *Monœcia*, in which these trees are placed, the botanist will know that they produce male and female flowers separately, but on the same tree. The male flowers are so productive of farina, that it has sometimes been carried away by the winds, in such quantities, as to alarm the ignorant with the notion of its raining brimstone. Clouds of this yellow dust may often be seen hovering around these trees in the spring, when the stigmas are ready to receive this fructifying powder.

The ancient Persians paid great attention to the natural history of plants, and often used them in allegory, both in writing and speaking. Herodotus relates that Darius sent word to the Greeks of Ionia, who were laying waste the country, that if they did not give over their depredations, he would treat them like pines. The Greeks, who by this time had become infected with wit, and had

proportionably began to lose sight of nature, did not comprehend the meaning of this ; but, upon enquiry, they discovered that Darius meant they should understand it to be his resolution utterly to exterminate them ; for the pine-tree once cut down shoots out again no more.

It is scarcely possible to behold the dark towering pine and fir, without having our thoughts carried back to very early ages, and also our reflections ; for these trees remind us of from what small beginnings great events often take birth.

These trees were dedicated to Diana, the immaculate virgin, who was supposed to preside over hunting. She was represented by the moon, because the light of the moon was propitious to huntsmen, for spreading their nets and other toils to entrap the game. The sports of the field were thought to be unfavourable to Venus, and were therefore more sacred to Diana. In the forest, the pine-tree was naturally made the rendezvous for the followers of the chase. The huntsman then suspended the head of a wolf on the branches of the pine or fir, to secure the protection of the chaste goddess. In time, the whole skin was displayed on it ; and as in that age, like the present time, there were

persons ready to turn this superstition to some account, they built a chapel for this goddess, where was offered not only a wolf's skin, but whole carcasses of sheep likewise, as a security to the rest of the flock from the jaws of the wolf. As offerings multiplied, the attendance on the chapel increased; the hunters attracted pilgrims to the altar of pines, and the pilgrims allured dealers of necessities to the spot. Thus, a town sprang up around the chapel, naturally filled with crafty and credulous persons. At length, oracles were announced and victories predicted; for which, generals and kings sent magnificent presents, until one of the chapels became a temple of such vast size and magnificence, as to be deemed one of the seven wonders of the world. It was this temple which is mentioned in the Acts of the Apostles, by selling silver models of which, the silversmiths of Ephesus made such great profit; and which they were in danger of losing by the introduction of Christianity. They, therefore, excited a furious tumult against its first preachers, whose principles were too pure, and full of charity and humanity, to be at first understood by the heathens; whose priests, no doubt, knew that fear has greater influence over the human mind, in general,

than confidence. Thus, at Tauris, the worship of Diana, was converted into one of terror, by having human sacrifices offered up to her; thus, transforming, what was in simple times intended to benefit mankind, into a curse, by the craft of those who perverted simple prayers to the profit of themselves, a temple and a city, where imposts were not only levied to support the priests, but all strangers landing there, or driven on their shores by storms, were cruelly immolated.

Garlands of pine leaves were awarded to the victors in the combats and sacred games of the Isthmian, which were celebrated by the Greeks every fifth year, and observed and held so sacred and inviolable, that even a public calamity could not prevent the celebration. These festivals received their name from the isthmus of Corinth, where they were observed as early as 1326 years before the Christian era; and when Corinth was destroyed by Mummius*, the Roman general, the games were observed with the usual solemnity, and the Sicyonians were entrusted

* Mummius, when he sent the precious statues and exquisite paintings of the Grecian artists to Rome from Corinth, threatened the masters of the vessels which conveyed them, that if their cargoes were injured or destroyed they should furnish new articles at their own expense.

with the superintendence, which had been before one of the privileges of the ruined Corinthians.

The fir was also dedicated to Pan as the god of huntsmen; and from his supposed residence being in those woods that are situated on rugged mountains, where the pine and fir-tree love to dwell.

The fir-tree was also sacred to Cybele, the wife of Saturn; hence Atys is generally represented as being supported by a fir-tree. The cones of the fir-tree were employed in the mysteries of Cybele, where even the priests were the first to indulge in the unbounded licentiousness and obscenities which prevailed in this festival.

The cones of the fir-tree were also offered up to Bacchus, and were likewise to be seen on the altars of Æsculapius.

Most of the temples of antiquity had their sacred groves or forests attached to them, where those abominable rites were often celebrated with the most horrible indecencies and terrible sacrifices. Cinnis, or Cercyon, was surnamed the bender of pines, because he tied his victims to the tops of two pines, which he bent down, and which, when he suffered them to rise again, tore the unfortunate wretch to pieces.

How can we sufficiently admire those sacred writers, who forbid the sacrifices of these detestable groves and abominable idols, but have made them the spots for quiet contemplation and calm reflection? Lord Thurlow says —

“The forest is to me the sweetest college
Of any, that the outward world can show,
Lacking professors, yet most rich in knowledge,
For vile profession is to virtue foe.

Wisdom doth here in all its branches grow,
Preaching in stones, and from the senseless wood,
Brawls in the brooks, and, wheresoe’er we go,
The tongueless lecture still is understood.”

Pliny tells us that neither the fir or pine grew naturally in the vicinity of Rome. This author observes that the best timber of this kind grew on the Alps and Apennines, from which circumstance we presume these mountains derived their names, as the Alps are frequently called Alpine mountains.

Pliny says likewise that there are excellent firs in France, Corsica, Bithynia, Pontus, and Macedonia; those which grew in Arcadia, he states, were not so good, but the worst grew on Mount Parnassus.

It is a remark of Cæsar’s, in his Commentaries, that during his stay in Britain, he did not see a fir-tree. At what exact period it

was first given to us by the Scotch is uncertain ; but it now beautifies the English hills as much as the union has benefited the Scottish people ; and it appears to us that we have as good a claim to the fir as the land of thistles.

Turner only notices what the ancient authors have written on these trees ; nor does Gerard state that the fir was cultivated in England in his time ; but from his account of this tree, we may claim it as a native of some counties in England, unless the Scotch have a claim prior to the deluge, or the formation of the Roman roads in England, in which case, with all our love for our rights, we shall cheerfully cede the fir-tree, *pinus sylvestris*, to our Highland friends.

Gerard says, “ The Firre trees growe vpon high mountains, in many woods in Germanie and Bohemia, in which it cōmmeth downe oftentimes into the valleies : they are found, likewise, in Pruse, Pomerania, Liefeland, Russia, and especially in Norway ; where I have seene the goodliest trees in the worlde of this kinde, growing vpon the rockie and craggie mountaines, almost without any earth about them, or any other thing, sauing a little moss about the rootes, which thrust themselues heere and there into the chinkes and cranies of the

rockes, and therefore are easily cast downe with any extreme gale of winde. I haue seene these trees growing in Cheshire, Staffordshire, and Lancashire, where they grew in great plentie, as is reported, before Noah's floud; but then being ouerturned, and ouerwhelmed haue lien since in the mosses and waterie moorish grounds, very fresh and sound vntill this day; and so full of a resinous substance, that they burne like a torch or linke, and the inhabitants of those countries do call it Firre wood, and fire woode vnto this day." From this it seems probable that we have given name to this tree, as it has no similitude to that of any other language, and it seems that its various names have been derived from the uses it was put to in Gerard's time, who calls it Firre tree (fire tree), Mast tree, and Deale tree.

Martyn says in his edition of Miller, "As to the immense forests of fir or pine discovered under ground, in various parts of these kingdoms, they were probably the *Pinus sylvestris* or Scotch pine: for the subterraneous cones which I have seen, evidently belonged to this species." Had Cæsar seen more of England, he no doubt would have seen fir-trees in many parts of the country, as they have been found in many situations, where the Romans

had thrown them down to form a basis to ~~the~~ roads in mosses and bogs. Mr. Whitaker says in his History of Manchester, "I have now in my possession two pieces of tried genuine fir, that were bedded with the remains of a birch-tree, one yard and a half in the mossy soil, and three yards under the crown of the Roman gravel; and it has also been very recently dug up, by myself, under the roots of the road over Failsworth Moss."

This tree is not peculiar to Scotland or England alone, as it is common in many parts of Europe, and Mr. Duhamel mentions his having received cones of this species of fir-tree from St. Domingo. The wood of this fir is the red or yellow deal, which is the most durable of any of the kinds yet known.

The Scotch fir is known from other species, by the leaves which issue from a white truncated little sheath, in pairs; they are linear, acuminate, quite entire, striated, convex on one side, and flat on the other, from an inch and a half to two inches in length, of a greyish green.

The cones are small, pyramidal, and end in narrow points; they are of a light colour, and the seeds are small. The scales of the male catkins roll back at top, and are feathered.

In favourable soils and situations, this tree

grows to the height of eighty feet, with a straight trunk. The bark is of a brownish colour and full of crevices. It is known by experience, that we have scarcely any soil so bad, or exposure so bleak, where this tree will not live; but when planted upon clayey soils, the timber is not of so good a quality, or the tree so long lived, nor does this species of fir stand the sea air so well as some other kinds, particularly the Pinaster.

Nature is the only pruner that should touch the fir-tree, as the lower branches gradually decay, from the root to the top, leaving no knot or blemish; and the time for felling these trees is known to be when all the branches are dead, except those at the very top. If a fir-tree, whilst in a vigorous state of growth, be much pruned, it will be reduced to premature old age, by the escape of its inflammatory juices.

The fir-tree is not calculated to stand in a small shrubbery; it belongs to a bolder style of scenery, and should be planted so as to give height to our hills, and variety to our views, where

“ Trees unnumber’d rise,
 Beautiful in various dyes:
 The gloomy pine, the poplar blue,
 The yellow beech, the sable yew,
 The slender fir, that taper grows,
 The sturdy oak with broad spread boughs.”

DYER.

In extensive shrubberies, on hilly situations, the fir-tree may sometimes be both usefully and ornamentally employed, as a back ground to shelter the more delicate trees, whose lighter foliage will also shine with more splendour by the contrast. When the walks wind near or through the plantations of firs, we should do well to take a hint from Shenstone, who says,

“ Not a pine in my grove is there seen,
 But with tendrils of woodbine is bound ;
 Not a beech’s more beautiful green,
 But a sweet-brier entwines it around.”

But this hardy offspring of bleak and snowy mountains seems intended for utility more than beauty, and we would, therefore, recommend it to be planted for profit rather than pleasure, for few trees have been applied to more uses than this. From the time of Solomon to the present day, it has formed rafters to the houses of our cities, and masts to the vessels of our navy.

——— *Dant utile lignum*
Navigiis Pinus. Georg. ii.
 “ The useful pine for ships.”

Its resinous and durable quality has recommended it for numberless domestic purposes, in modern as well as ancient times ; when, if we can rely on poetical accounts, it was used by the Greeks in the formation of the cele-

brated horse which Sinon prevailed on the Trojans to admit into their city, and which caused its overthrow.

“The Grecian chiefs for many years in vain
 Attacking Troy, yet being repulsed again,
 At last a horse of mountain size contrived
 By Pallas’ art, that moved and seem’d alive ;
 For ribs were massy planks of Firs inlaid,
 And a report throughout their camp they spread
 That for their safe return, a vow they’d made;
 But in the hollow of the vast machine
 They had convey’d choice troops of armed men.”

LAWDERDALE.

The advantages that have arisen from the forming large plantations of the Scotch fir in the northern parts of Scotland, have not been confined alone to the profit obtained upon the timber, which has been such as fully to satisfy the owners, but it has rendered some of the barest moors, the bleakest and most inhospitable situations, habitable, and thus as it were, extended the bounds of these dominions ; for with these plantations, dwellings have sprung up, and land, which thirty years ago was not considered worth twopence per acre, now, in many instances, lets from ten to thirty shillings per Scotch acre.

In the neighbourhood of these large plantations, houses can be reared at little expence, which induces settlers to make their dwellings in these spots, where they can ob-

tain timber, not only for building, but also to form good fences to their gardens and fields, and fuel for their hearth, whilst cutting and manufacturing the wood furnishes employment to many. Hence the population is augmented, and a demand for land, which is soon brought into a state for cultivating hardy plants.

The leaves and branches of the Scotch fir afford a very wholesome nourishment to cattle and sheep, which is no small consideration in mountainous countries, where the snow lies sometimes upon the ground for many weeks together. The resinous roots are dug out of the ground in many parts of the highlands of Scotland, and being divided into small splinters, are used by the inhabitants instead of candles. The fishermen make ropes of the inner bark, and hard necessity has taught the Laplanders and Kamschatdales to convert it into bread. To effect this, in spring they strip off the outer bark carefully from the fairest trees, and collect the soft white succulent interior bark, and dry it in the shade. When they have occasion to use it, they first toast it at the fire, then grind it into powder, which they steep in warm water to take off the resinous taste; it is then formed into thin cakes, baked, and eaten with as

much thankfulness, or more, than the poor of this country would accept oaten cakes or brown wheaten bread.

Linnæus remarks, that the bark of the fir-tree so prepared will fatten swine ; which is an observation that may be worthy the attention of the Highlander. It is said that the boys in Sweden frequently peel off the bark of this tree in the spring, and eat it raw with much pleasure.

It is from the trunk and branches of the fir and pine trees that tar and pitch are obtained. Thus we take not only their body, but their very blood for the formation and security of our shipping. It is curious, says Pliny, that those trees, which are so much sought after for nautical affairs, should delight to dwell on the highest mountains, as if they fled from the sea, through fear of the waters. Burgundy pitch and turpentine are also procured from these trees, which are so extremely resinous, that if not evacuated of their juice, they often swell and burst. The juice, as it issues from the tree, is received in trenches made in the earth, and afterwards freed of its grosser impurities by colature through wicker baskets.

The common turpentine is about the consistency of honey, of an opaque, brownish-white colour ; it dissolves in rectified spirits,

and its use in medicines is as well known to the apothecary, as to the house-painter as a drier. Nor is the rosin which oozes from these trees better known to the scrapers of catgut than to the manufacturers of salves and ointments; and as Orpheus set the trees in motion by his melodious strains, so has this tree in return assisted mankind to make the merry movement “on light fantastic toe.” This favourite tree of Pan lends its aid also in giving breath and tone to the solemn sounds of the organ’s harmonious voice. Thus the gay and the grave are equally indebted to this tree of the mountain, in whose branches, says the Psalmist, “the heron loves to build her nest.”

THE SILVER FIR-TREE.—*Pinus Picca*.

THIS noble tree is surnamed *Picca*, or Pitch-tree, from the quantity of tenacious juice or gum which its trunk yields; and which, in ship-building is so well known by the name of pitch. We call it the Silver Fir, from the colour of its leaves on the under side, which have a white line running lengthwise on each side of the midrib, and as these leaves are

shorter and broader than those of other firs and pines, and likewise set much thicker on the spray, it has a beautiful silvery appearance when the under side is viewed, or when the wind turns the branches from the eye, whilst the upper surface is of the brightest and handsomest green of all the species of fir.

The silver fir throws off its lower branches as it acquires age, leaving its bark smooth and delicate. It grows perfectly upright, and to a great height, carrying all its foliage at the top, like the palm. We have lately seen two trees of this kind in the Hare garden of — Sargeson, Esq. near Cuckfield, which, for size and beauty are not exceeded by any trees of this kind in the kingdom. The cones of this fir are of considerable size and beauty. Tournefort tells us in his travels that he has received cones of this fir from mount Olympus, upwards of a foot in length.

The *pinus picea* is a native of Switzerland and Germany, Dauphiné, Austria, Siberia, mount Caucasus, &c. Evelyn is the earliest author who notices the tree in this country. He tells us, in 1663, that there were then two silver firs growing in Harefield Park, Middlesex, belonging to Mr. Serjeant Newdigate, that were planted there in 1603, at two years' growth from the seed, the biggest of which

was eighty-one feet high, and thirteen feet in circumference below; the length, so far as it is timber, that is, to six inches square, seventy-three feet; in the middle, seventeen inches square, and containing 146 feet of good timber, which it acquired in about sixty-three years.

It has been observed in Ireland, that no tree grows speedily to so large a size as the silver fir; some of forty years growth, in a wet clay, on a rock, measuring twelve feet in circumference, at the ground, and seven feet and a half at five feet high. It is known to be excellent timber for boat-building and Mr. Young tells us of a gentleman in Hampshire, who floored his library with silver fir, fresh cut down, and the boards did not contract in the least.

In forming plantations, our first care should be to attend to the nature of the soil, and then select those trees which thrive best on the kind of food we are about to offer them; for they are all, says Delille,

“ In secret channels fed,
From root to trunk the wandering sap is led;
Thence through the boughs its liquid virtue sends,
Till in the leaves its rising effort ends.”

“ I have seen,” says Martyn, “ some fine trees of this sort of fir, which grew upon natural

bogs, where, by extending their roots, they had drained the ground to a considerable distance found them." "It is in vain," says Mr. Boucher, "to plant the silver fir in hot, dry, or rocky situations, where it commonly loses the top shoots, and the under branches soon become ragged. The largest and most flourishing trees are seen on sour, heavy, obstinate clay; and though for ten or twelve years they do not advance so fast as several other firs and pines, yet in twenty they will outgrow them all. They should not be too close, but require a free circulation of air; whilst the Scotch fir, which thrives in a different soil and situation, prospers best when planted thick; for it is observed, that until the branches intermingle and mutually support each other, the trees never begin to advance with vigour. These plantations generally require thinning from about the tenth to the fourteenth year after planting."

The Dutch have made many a vain attempt to make the fir grow at the Cape of Good Hope, in order to find a supply of ship-masts, which sell at a high price in India; but in England we can find a tree that will grow in every soil we possess, and often to great advantage. In a little work entitled *Practical Economy*, we are told that in the year 1758,

ninety-two fir-trees were planted upon a piece of ground, about three quarters of an acre in extent. The land was waste and poor: no extra expense was incurred, and no attention was paid to the young trees. In 1813 they were cut down, and yielded ninety tons of timber, then worth 4*l.* per ton, giving a round sum of 360*l.* which was equal to a rent of 6*l.* 10*s.* during the intervening fifty-five years.

We have often regretted that the trustees of public roads cannot be induced to plant the waste ground which often borders the turnpike with trees, which would greatly ornament the country, accommodate the traveller by shade and shelter, and in time be the means of lowering the toll.

The balm of Gilead fir, *pinus balsamea*, is so called, because the turpentine which is obtained from the wounds of this tree, is similar to the true balm of Gilead, for which it is sometimes sold. The buds and leaves of this tree are also very fragrant, which induces us to give it a situation in the shrubbery. It is a native of North America, and was growing in the Bishop of London's garden, at Fulham, as long back as 1696; but it does not generally arrive at any considerable size in this country. The finest specimens, we are told,

are at Woburn Abbey, in Bedfordshire, the seat of His Grace the Duke of Bedford. It requires a sheltered situation and a good deep soil. The leaves are coloured, like those of the silver fir, but wider and blunter, and disposed on each side along the branches like the teeth of a comb; but in a double row, the upper one shorter than the under. Underneath, they are marked with a double glaucous line, and each has eight rows of white dots. The cones of this fir are small and of a roundish shape.

The hemlock fir, *pinus Canadensis*, is also a native of North America. It was first introduced into English pleasure-grounds by Peter Collinson, Esq., in the year 1736. It is a beautiful but delicate tree, requiring a good soil and a warm sheltered situation. Mr. Boucher says, it would be improved by tying its leading shoot to a stake annually as it advances. It is not found to thrive well in any part of England, nor in many parts of America; though, in other parts of that continent, it grows to be a very large tree.

FURZE. — ULEX. — GORSE OR WHIN.

*Natural order, Papilionaceæ or Leguminosæ.
A genus of the Diadelphina Decandria class.*

“ The common overgrown with fern, and rough
With prickly gorse, that shapeless and deform’d,
And dangerous to the touch, has yet its bloom,
And decks itself with ornaments of gold,
Yields no unpleasing ramble: there the turf
Smells fresh, and rich in odoriferous herbs.”

• COWPER.

THIS British beauty too rarely occupies a spot in the English shrubbery, where its yellow flowers would shine as conspicuous in the dreary month of November, and scarcely less ornamental than the gay laburnum of May and June; and which it as greatly excels in perfume, as in the duration of its flowering, which is generally from the end of March, until the end of December; and even the remaining months, are not without some sprinkling of these papilionaceous flowers; and from which the rustics remark, that love

goes out of fashion, when the furze is out of blossom.

This plant, which is as singular by its *chevaux-de-frise* branches, as enlivening by its golden colour, is only to be found in temperate climates. Provence is its boundary to the south, and it reaches neither Sweden nor Russia towards the north. Linnæus lamented that he could hardly preserve it alive in a greenhouse; and so rare is it in many parts of Germany, that Dillenius, their botanist, was in a perfect ecstasy, when he first visited England, and saw our commons covered with the gay flowers of the furze-bush.

—— “ The sight is pleased,
The scent regaled, each odoriferous leaf,
Each opening blossom, freely breathes abroad
Its gratitude, and thanks him with its sweets !”

Gerard tells us, that he was “ desired by diuers earnest letters,” to send seeds of our common furze and broom to Dantzick, Brunswick, and Poland, where the plants were most curiously kept in their fairest gardens.

The furze-bush is the favourite nestling bush of one of our feathered warblers, which did not escape the sweet poet of the seasons.

“ Nor are the linnets, o’er the flowering furze
Pour’d out profusely, silent.”

How many situations have we seen, where the hedge-rows might be relieved of their sameness, and a cheerful variety given to the view, by simply scattering a few clumps of furze-seed at unequal distances ;

——— “ Affording prospect sweet
To human ken ;
——— the yellow fields
Gaily interchanged, with rich variety
Pleasing, as when an emerald green, enchased
In flamy gold, from the bright mass acquires
A nobler hue, more delicate to sight.”

In the shrubbery, it should be placed at a distance from the walks ; and where it is viewed between or beneath evergreen-trees, it has the best effect. In these situations, it often grows to a considerable height, and forms an admirable shelter to more delicate plants.

Although the furze-bush is sometimes quite cut off by severe frost, yet it springs up again from the root with additional beauty ; and it has the quality of enduring the sea-breeze, which it seems to delight in, as we have found it in flower at all seasons of the year in such situations, and often so near to the edge of the water, as to have its roots washed by the advancing waves. These are situations, also, where it should be cultivated

particularly by those who have dwellings near the shore, as the ocean is seen with additional advantage, when viewed over these yellow-clad shrubs.

The furze is generally considered to be the *Σκόρπιος* (scorpius) of Theophrastus, and the *Ulex* of Pliny, which was a shrub, the ashes of which were used as a lie for separating gold from the substances with which it was mixed. In later times it was evidently thought to be a species of broom, as Dodonæus, Bauhinus, Tragus, Lobel, and other writers style it *Genista spinosa* (thorny broom).

Gerard says, "There be diuers sorts of prickley broome, called in our English toong by sundry names, according to the speech of the countrey people where they do growe; in some places Furzes, in others Whinnes and Gorsse, and of some Prickley Broome." This author adds, "We haue in our barren grounds of the north parts of England another sort of furze, bringing foorth the like prickly thornes that the others haue; the onely difference consisting in the colour of the flowers; for the others bring foorth yellowe flowers, and those of this plant are as white as snowe." He calls this plant *Genista spinosa flore albo*.

Parkinson says, in 1640, "In the north parts of this land I heare that in diuers places,

the furse, or gorse bushes as they call them, beare very white flowers, differing in nothing else from them that bear yellow, for they are often seene both growing together in one ground."

As we have neither seen or heard of this variety in modern times, we fear it has become extinct; and that it was merely a variety caused by the seed falling into some peculiar spot of soil, which had become more delicate than the natural plant.

Furze is not without its uses in rural economy; but time which civilizes one country, and throws others back into barbarity, changes also the habits of men so effectually, that what is deemed a blessing in one age, is almost considered a curse in the next. In this kingdom, where we now descend into the bowels of the earth and scoop out its stratas of sulphureous inflammable fossils, for our domestic fuel and manufactory fires, the furze-bush is less regarded than formerly, and more particularly since the improvement of our roads and the increase of our canals has rendered the conveyance of coals so easy to all parts of the country, that it is now generally used by the agriculturist in burning lime, which was formerly done by furze-bushes only. No longer back than the time of

Charles the Second, we are told by Evelyn, that the cultivation of the common furze was as profitable in Herefordshire, on their poor land, as the best wheat land in England. He adds, that “in Devonshire (the seat of the best husbands in the world) they sow on their worst land, well plowed, the seeds of the rankest furze, which, in four or five years, becomes a rich wood: no provender, as we say, makes horses so hardy as the young tops of these furzes; no other wood so thick, nor more excellent fuel. The young and tender tops of furze, being a little bruised, and given to a lean horse,” he tells us, “will strangely recover and plump him.” M. Pirolle informs us in *Le Bon Jardinier* for 1822, that in many parts of France, particularly Normandy, the furze-bush is ground or bruised in a cider-mill, and given to their horses with advantage. Goats, kine, and sheep, as well as horses, feed upon the tender tops of furze with pleasure. It is at present much less sown for hedges than it was some years back, because it was found to become naked at bottom, which might be prevented by keeping it cut in the same manner as the quick-set. On very poor hungry gravel or sandy land this crop may still be turned to profit, as the country house-wife will give a price for the

furze faggot, which heats her oven, and supplies her with excellent ashes for her lie. During the height of agricultural prosperity, it was principally sown as a cover for game, for which it is admirably adapted; and it is with great pleasure we see it employed for this purpose in poor lands, as we are no less an advocate for the increase and preservation of game, than we are desirous to see the game laws new modelled and justly administered; for surely what a gentleman rears with expence, and preserves with care on his own estates, ought to be as decidedly his own as the deer in his park, or the poultry in his yard. But at present it is his to shoot, but not his to dispose of; he dares not send it to the open market to benefit himself, or to gratify the public, who do, and ever will, esteem it hard that laws should forbid them to eat such wholesome food as they have a desire for, and money to purchase. We admit that a qualified person is allowed to make presents of game, but we cannot ask our licensed friends for a brace of birds without giving them the idea that we think ourselves neglected; and few would wish to give, or conceive such an idea.

It is not long since the physicians of Paris forbade a most interesting invalid of our family

to take any animal food excepting partridges, which were recommended as a daily diet. These were easily obtained, so long as we remained not only in that city, but in all the country towns likewise; but the moment we arrived in an English town, this comfort was forbidden, unless we would either condescend to beg, or risk the penalty of offended laws.

We feel satisfied that if game were allowed to be as publicly sold as venison, we should in a few years hear no more of poachers than we now hear of deer-stealers.

The number of poachers, who, at the present time, fill our prisons, is a national disgrace, whilst their terrible boldness and infamous acts would be revolting to the most uncivilised nations; but as long as luxury demands, and the laws forbid, the regular supply of this kind of food, so long will there be found men to pursue the nefarious trade of poachers. We hear of no poachers on the continent, where game is publicly sold; and it would be hardly more unreasonable to banish mutton from our shambles for fear of creating sheep-stealers.

At the time when the luxury of the patricians was undermining the safety of the Roman empire, the plebeians were prohibited by law from eating artichokes, which were then con-

sidered a dainty for man, although Pliny considered it the natural food of the ass.

Botanists divide the furze into two species, *Ulex Europæus*, the common large kind, and *Ulex nanus*, the dwarf furze, with decumbent branches, and spines horizontal, or partly deflexed. Dr. Witherington thus distinguishes the two species. In the common one, the corolla is longer than the calyx, and the thorns longer than the corolla. In the dwarf furze the corolla is as long as the calyx, and the thorns are shorter than the corolla.

Naturalists observe, that the pods of the furze open with the warmth of the sun, and that the seeds are cast out by an elastic spring to a great distance all around, where they soon vegetate.

The furze is an excellent shelter, where the seeds of forest trees, such as acorns, beechmasts, chesnuts, &c. are planted; as this thorny shrub will secure them until they grow up, when the trees will starve and destroy their early protectors.

“ And what more noble than the vernal furze,
With golden baskets hung? Approach it not,
For ev’ry blossom has a troop of swords
Drawn to defend it. ’Tis the treasury
Of fays and fairies. Here they nightly meet,
Each with a burnish’d kingcup in his hand,
And quaff the subtile ether.”

HURDIS.

GUELDER ROSE.—VIBURNUM
OPULUS.

Natural order, Dumosæ Caprifolia, Juss. In the wild state it is a genus of the Pentandria Trigynia class.

“ The snow-ball which eclipses
The white bosom of Venus.”

THIS offspring of accident or cultivation, which Vertumnus presents to our shrubbery, to harmonize with the elegant lilac, and group with the gay laburnum, holds a conspicuous situation in the regions of Flora,

—— “ Throwing up into the darkest gloom
Of neighbouring cypress, or more sable yew,
Her silver globes, light as the foamy surf
That the wind severs from the broken wave.”

. This native shrub often rises to the height of eighteen or twenty feet, clothing itself with a light green foliage, lobed in a similar manner to that of the maple-tree, and decorating its grey irregular branches with clusters of abortive flowers, resembling the works of the

cularly in the months of May and June, when they exhibit themselves on the glittering green foliage, forming a most agreeable picture.

Gerard, who has left us engravings of this neutral flowering shrub, calls it *Sambucus Rosea*, the Rose Elder. This excellent author says, “The *Sambucus palustris*, the water elder, groweth by running streames and water-courses, and in hedges, by moist ditch sides. The rose elder groweth in gardens, and the flowers are there doubled, by art, as it is thought.” We learn from this account that it was not then, 1596, considered either rare or new. He says further, “In my garden there groweth not any fruit vpon this tree, nor in any other place, whereof as yet I haue any vnderstanding or knowledge;” to which he adds, “it is an hedge-tree; the Dutch call it Gheldersche Roose, in English Gelders Rose, and Rose Elder.” Thus it appears we borrowed the inelegant name of Guelder Rose from the Dutch, to whom we would have it returned; being better pleased with the appellation of snowball, which its extreme whiteness and globular form resemble. This name is also conformable to the *Schneeball* of the Germans, and *Boule de Neige* of the French.

The Dutch name is *Guelder*, after Guelderland, from whence they first procured it, as the additional *sche* (from) denotes. The generic name *Viburnum* is thought to be from *vico*, to bind; because some species of these shrubs have twigs, fit for bands. Aiton notices twelve different species of *viburnum*, some of which have numerous varieties.

It rarely occurs, that flowers growing in their natural state and habits, become double; and when this adventitious circumstance takes place, it arises principally from an excess of nourishment, from the effect of cultivation, or of some occurrence of natural circumstances analogous to it. It is one of the principal objects of the florist, to double the petals of flowers as much as possible, because great rarity is more sought after than pure beauty; and in general estimation, the beauty of a flower is augmented in proportion to the number of its petals; but the botanist turns from such flowers with disappointment, because he sees one of their parts unduly augmented, to the diminution or total exclusion of some of the rest; for the anomaly most generally consists in the multiplications of the divisions of the corolla, by the conversion of parts of the stamens into petals; but in the guelder rose, the corollas are increased,

to the utter exclusion of both stigma and stamina; hence, this plant cannot produce seed, but as it is easily propagated by layers or cuttings, as well as by suckers, this variety is kept perfect. In its natural uncultivated state, this shrub produces its flowers on cymes, the inner ones of which are perfect flowers; but those in the margin of the cyme are abortive, and merely consist of a large, irregular, flat petal, without any organ of fructification.

The guelder rose or snowball-tree, loves a moist soil; where it not only grows more rapidly than in dry situations, but produces more numerous and larger globes of its pale petals. Emblematially, this flower is used to represent the winter of age.

HAWTHORN, OR WHITE THORN.— CRATÆGUS.

*Natural order, Pomaceæ. Rosaceæ, Juss. A
genus of the Icosandria Digynia class.*

“ Now let me sit beneath the whitening thorn,
And mark thy spreading tints steal o’er the dale :
And watch with patient eye
Thy fair unfolding charms.”

MRS. BARBAULD.

“ Gives not the hawthorn-bush a sweeter shade
To shepherds, looking on their silly sheep,
Than doth a rich embroider’d canopy
To kings, that fear their subjects’ treachery !
O ! yes, it doth ; a thousand fold it doth.”

SHAKESPEARE.

“ And every shepherd tells his tale
Under the hawthorn in the dale.”

MILTON.

THE garland of Flora does not possess a more charming blossom than this British hedge beauty ; nor do the most luxurious spices of Asia, give a more grateful perfume

than this flowering shrub, which covers its thorns with petals as white

“ As when the piercing blasts of Boreas blow,
And scatter o’er the fields the driving snow.”

————— “ Now the air
Is rich in fragrance ! fragrance exquisite
As new mown hay !”

“ Then, solitude, ’tis thine in every gale
To hear celestial breathings ; from each hill
To quaff the balmy essence of the breeze ;
To mark, in every magic change of scene,
The grand diversities of nature’s laws,
Yet find in all the ever-present God !
Whose power, sublime, with equal wonder moves
In the small floweret bursting from the earth,
As in the sphere-crown’d eagle’s towering wing !”

MRS. ROBINSON.

It is said, that the hawthorn flowers, not only regale the spirits by their odour, but that they have the power also of counteracting poison. It has been made the happy emblem of hope, because the young and beautiful Athenian girls brought branches of hawthorn flowers, to decorate their companions and friends on their wedding-day ; whilst they carried large boughs of it to the altar. The altar of Hymen was lighted with torches made of the wood of this tree, and it formed also the flambeaux which lighted the

nuptial chamber. The Romans had, also, bedecked themselves with branches of hawthorn, when they seized the Sabine women ; and it was, therefore, used by them in the *fascēs nuptiarum*.

Diodorus, a Sicilian historian, who flourished about forty-four years before the Christian era, tells us, that the Troglodites, when they interred the corpse of their friends or parents, tied branches of hawthorn to their bodies ; and then, laughing, strewed the body first with the branches of this shrub, and afterwards with stones, until it was covered. These simple people considered death as the morning of life, where they should never separate. Happy hope ! which gave the Troglodites immortality, and the Grecian youths fond marriages ; may you likewise, ever be the prop of the afflicted, and of those whose friends

“ When they once perceive
The least rub in your fortune, fall away
Like water from ye, never found again
But when they mean to sink ye.”

Religion, which was given to bless mankind with cheerfulness and hope, has always been converted by the crafty, in ignorant ages, into rods of terror and torches of superstition ; and they did not fail to seize on the haw-

thorn-bush, as an instrument with which they might impose on the credulous; thus, in some parts of France, the country people affirm to you in good faith, that the hawthorn groans and sighs on the evening of Good Friday; and on this superstition, they have made it the emblem of lamentation. There are others, who gravely adorn their hats with a bunch of hawthorn, in the belief, that during a storm, the thunder will not dare to reach them from respect to their head-dress. It is also related, that on the morning following the horrible massacre of St. Bartholomew a hawthorn was seen to blossom in the church-yard of St. Innocent, in Paris, which is now converted into the hall or great market. It is hardly necessary to state, how differently the two parties interpreted this phenomenon.

We have also our Glastonbury thorn stories, to match those of our neighbours. Sanctified deceit affirmed, that this thorn was the identical staff of Joseph of Arimathea, the counsellor, who buried Christ; who, according to the tradition of the abbey of Glastonbury, attended by twelve companions came over into Britain, and founded, in honour of the blessed Virgin, the first Christian church in this island. As a proof of his mission, he is

said to have stuck his staff into the ground, which immediately shot forth and blossomed; and the vulgar for a long time believed that this tree blossomed annually on Christmas day.

The Glastonbury thorn is a variety of the common white thorn, *oxyacantha*, which blossoms in the winter about January or February, and sometimes even as early as Christmas.

Dioscorides names this shrub Ὀξύανθα (*oxyacantha*), whilst Theophrastus writes it Κράταιγος, or Κράταιγών, which is supposed to be derived from κράτος, which signifies strength. It appears to be the *spina* and *spina appendix* of Plin y.

The fruit of this bush are called haws, from whence the name of Hawthorn, which some suppose to be from the German *hagedorn*, the Danish *hagetorn*, the Swedish *hagtorn*, or the Dutch *hage*.

It is often called white thorn from the colour of the flower-petals, and May-bush from its blossoms appearing in that month, and which were more noticed in old times before the country was embellished with so many early-blowing exotic shrubs; for on the festival of Flora, on the first of May, our ancestors never failed decorating with it the May-pole, which was permanently fixed in or

near every town and village in the kingdom, and the boldest youth climbed to fix the garland of flowers on the top, whilst others less courageous, hung festoons and wreaths of flowers through the garland, or twined them around the pole,

“ To fetch the flowers fresh, and branch and blome ;
 And namely, hawthorn brought both page and grome,
 With fresh garlandes, party blen and white :
 And then rejoyssen in hir grete delite.”

CHAUCER.

A king and queen were then elected, who regulated the entertainment, and settled disputes ; the former was distinguished by an oaken wreath, and the latter by one of hawthorn : when dancing and other rural sports took place in honour of the goddess. This rustic amusement was evidently introduced by the Romans, as we see in it the remains of their ancient games, Floralia, that were instituted in Rome as early as the time of Romulus, and which the Phoceans and Sabines observed even in earlier days. As Rome became degenerated, this feast was turned into scenes of the most unbounded licentiousness ; and it is related that Cato wished once to be present at the celebration, but when he saw that the deference for his presence interrupted the feast, he retired, not choosing to behold

the indelicate spectacles about to take place in public. This behaviour so captivated the degenerate Romans, that the venerable senator was treated with the most uncommon applause as he retired, which shows that virtue and modesty are always respected even by vice itself.

At the present time there is not a door at Athens, that is not crowned with a garland of flowers on the 1st of May ; and the youth of both sexes, with the elasticity of spirits so characteristic of a Greek, forget, or brave, their Turkish masters, while, with guitars in their hands and crowns upon their heads,*

“They lead the dance in honour of the May.”

The French have given the elegantly appropriate name of *Aubépine* to this flowering thorn, which means the morning of the year, as *aube* expresses the white, or twilight, before sun-rise. Passerat, a French poet, compares these flowers to the dangers of love.

Belle fleur, d'Eglantier, belle fleur d'Aubépine,
 Désirant vous cueillir, bien souvent on s'épine ;
 Qui désire, en amour, cueillir de belles fleurs,
 Il n'y cueille souvent que regrets et que pleurs.

* Douglas's Ess. on the Ancient and Modern Greeks.

In the French language it is also called *Epine blanche* ; in Spanish, *Espino blanco* ; in Italian, *Biancospino*, which names are all analogous to our white thorn.

Religious devotees call it the noble thorn, from a belief that it was this thorn which formed the crown of Christ.

The hawthorn branches are scarce less gaily besprinkled by Flora in the spring, than adorned by Pomona in the autumn, who nourishes the feathered choristers with these scarlet haws ; and on this account we would have in our shrubbery

——— “berry-bearing thorns,
That feed the thrush.”

And none should omit

“The hawthorn-bush, with seats beneath the shade,
For talking age and whispering lovers made.”

The double-blossomed hawthorn is certainly one of the greatest ornaments of our pleasure-grounds, whether it be kept as a shrub, or trained as a tree. There are two large trees of this description on the lawn before Warwick-house, at Worthing, whose impenetrable shade defies the beams of Sol, when he darts his fiercest rays.

Some of the double varieties are of a fine lake colour, others are white at their first ap-

pearance, and change to a faint red as they decay. The double blossoms are less fragrant than the common variety, which reminds us, says a French writer, of those young females who fear not to change their simple apparel for a more gaudy dress, which adds nothing to their attractions.

The foliage of the hawthorn is of the most agreeable medium green, and so highly polished, that the white flowers are reflected on their shining surfaces.

In husbandry, these shrubs are called quicksets ; and when kept well cut, they form hedges scarcely less impregnable than those composed of holly. The clipping of hedges and trimming of trees, must certainly be advantageous to the farmer, although it adds nothing to the beauty of rural scenery. Crabbe observes,

“ We prune our hedges, prime our slender trees,
And nothing looks untutor'd and at ease.”

These verdant walls are greatly improved in appearance, when an occasional branch is suffered to grow in shape of a tree, above the shorn hedge. Hawthorn hedges appear to have come into use about the time of Charles the Second, as Evelyn observes in his *Sylva*, “ I have been told of a gentleman who has

considerably improved his revenue, by sowing haws only, and raising nurseries of quicksets, which he sells by the hundred, far and near. This is a commendable industry, and any neglected corners of ground will fit this plantation."

The seed of the hawthorn seldom vegetates until the second year; but if turkeys be fed with these haws, and their dung planted in drills, the young plants appear above ground the first year. Mr. Boucher says, the haws should remain on the bushes till the end of October, when they become blackish. "If you do not sow them immediately, as soon as they are gathered, spread them on an airy floor for five or six weeks, till the seeds are dry and firm; then plunge them into water, and divest them wholly of their pulp, by rubbing them between your hands with a little sand; spread them again on the loft three or four days, till quite dry; mix them with fine loose sandy mould, in quantity not less than the bulk of the seeds, and lay them in a heap against a south wall, covering them over three or four inches deep, with soil of the same quality as that with which they are mixed. If you do not sow them in the spring, in this situation let them remain till the second spring, as the seeds, if sown, will not appear

the first year. That the berries may be as equally mixed with the soil as possible, turn over the heaps once in two months, blending the covering with the seeds, and at every turning give them a fresh covering, in the winter months. They should be sown the first dry weather in February, or the beginning of March. Separate them from the loose soil in which they were mixed, with a wire sieve. The ground should be good, dry, fresh land, well prepared; and the seeds beat down with the back of a spade, and then covered about half an inch thick with mould; or they may be dropped in drills about eight inches apart."

The yellow-berried hawthorn, which was originally brought from Virginia, has a double recommendation to the shrubbery, as it

"Smiles in the bud, and glistens in the flower;"

for its buds are of a fine yellow in the spring, and its fruit, which is the colour of pure gold, or Seville oranges, hang on the branches nearly the whole winter, giving great gaiety to the plantation; and it is generally very productive of haws.

Evergreens should never be planted without a few of these shrubs being intermixed, to enliven them in the winter months. The

variety of the common hawthorn which bears large oblong haws of a bright scarlet colour, should also be planted for effect in winter; as its red fruit is often seen shining through the snow-bedecked branches with peculiar beauty. But the lovers of nature will always find charms in plants. Philips writes to the Earl of Dorset, from Copenhagen,

“ Soon as the silent shades of night withdrew,
 The ruddy morn disclosed at once to view
 The face of nature in a rich disguise,
 And brighten'd every object to my eyes;
 For every shrub, and every blade of grass
 And every pointed thorn seem'd wrought in glass;
 In pearls and rubies rich the hawthorns show.
 While through the ice the crimson berries glow.”

It has often created our surprise that men who expend large sums of money in forming gardens of pleasure, and much time in selecting plants, should bestow no time or attention on botany, which would add so materially to the gratification which flowers give them; for without some slight knowledge of this science, they cannot enjoy the works of nature, because they do not know where to look, or the utility of what they look at. The botanist looks into the flowers of the hawthorn not only to observe the stigma and to count the chives which surround it; but he

observes the shape of the five petals, whose concave forms protect the pollen, and mature it by acting as reflectors. He then sees them bend over their chives, and rest their heads of pollen on the stigma, which has some attractive power not yet defined. He is delighted at the regularity and order with which they discharge their prolific powder, and retire back to give place to other chives, until the whole have performed their office without confusion. He knows then that the petals have discharged their part towards the formation of the future plant, and he sees them given to the wind without regret; because he knows it is necessary for the young fruit to enjoy the juices of the plant, without its being spent any longer on the petals. Thus,

——— “ The garden yields,
A soft amusement, an humane delight,”

not enjoyed by others, who say,

“ But our attractions are a stronger sort,
The earliest dainties and the oldest port.”

The hawthorn is peculiarly adapted for small lawns or paddocks, where larger trees cannot be admitted. When standing singly, it often reaches to the height of twenty-five or thirty feet, with a trunk from four to eight feet in

circumference. The wood is tough and good for the turner's use, being but little inferior to box. Combs were formerly made of this wood, particularly from the root. A decoction of the bark yields a yellow dye ; and with copperas is used to dye black. Not only the birds, but the peasants in many countries, eat the haws, and in Kamschatka they are fermented into wine.

A variety of the common hawthorn, *Crataegus oxyacantha*, has been discovered in a hedge near Bampton, Oxfordshire, which produces white berries.

HAZEL. — See *Pomarium Britannicum*.

HEATH.—ERICA.

Natural order, Bicornes. Erica, Juss. A genus of the Octandria Monogynia class.

——— “Heath, and rugged thorn,
Shew the sad image of a soil forlorn.”

DELILLE.

DR. ANDERSON affirms, that wherever heath abounds, there is generated, by the rotting of the plant, a peculiar black earth, that is not only of itself sterile, but has a powerful tendency to make any other soil unfertile. But however our native plants may be affected by this earth, it is clearly known that we cannot cultivate with success many of the exotic beauties that now grace the shrubbery without giving them this soil, so congenial to their nature, nor can we succeed in raising our native heaths without giving them their native mould.

Theophrastus calls this plant, *Ἐρείκη* (ereike); from *ἐρίκω*, or *ἐρείκω*, *frango*, to break; from its

supposed quality of breaking the stone in the bladder. The English name of Heath is evidently derived from the German *Heide*, though some think it is from the Latin *Erica*. In some parts of England it is called Ling, from the Danish *Lyng*. In Scotland it is called Hather and Heather. Their Poet of nature says,

“ The moorcock springs, on whirring wings,
Among the blooming heather.”

These undershrubs, or miniature trees, beneath whose roots the jumping rabbit loves to burrow, enliven the dreary common by their violet bells, or empurple the forest-bank by their numerous corollas, which are often happily harmonized by the cheerful broom.

“ A heath’s green wild lay pleasant to his view,
With shrubs and field-flowers deck’d, of varied hue;
There hawthorns tall their silver bloom disclosed,
Here flexile broom’s bright yellow interposed.”

The foliage of the heath is evergreen, and of various and beautiful shapes, which, on inspection, is found as pleasing as its singular blossoms. It is made the emblem of solitude in the language of flowers; and thus, when the fond swain presents his mistress with a bouquet of heath and pansies, she understands his

heart would be at ease, if his solitude were blessed by her society. Other flowers carry the expression of "Think of me in solitude;" and a hundred other woeful speeches are thus silently told. To such a pitch of perfection is this language carried by lovers in the East, that they employ even the different shades to describe the different degrees of their passions.

Although the Cupid-pierced of our country generally explain the nature of their wounds by vocal or ocular language, yet we are desirous to meet the *Erica* in the shrubbery; for

"E'en the wild heath displays its purple dyes,"

and that to considerable advantage in many situations, filling up spaces between the walk and higher shrubs; and where the grounds are extensive and hilly, little clumps, let into the lawn, with a sprinkling of thyme, give a natural appearance and perfume to the spot. This genus of plants was entirely neglected in ornamental grounds until their beautiful relatives arrived from the Cape of Good Hope and other parts of the globe, to embellish our crystal gardens, where,

"Unconscious of a less propitious clime,
May bloom exotic beauty, warm and snug,
While the winds whistle and the snows descend."

The diminutive size of these plants, their extreme beauty and great variety, fit them better for the green-house than most other plants. Our collectors have now about four hundred species of heath, of such various colours and forms, as to defy the pen in description ; for some species present us with little wax-like flowers, others with pendent pearls ; some are garnished with coralline beads, whilst others seem to mimic the golden trumpet, or tempting berries, or porcelain of bell or bottle shape ; some remind us of Lilliputian trees, bedecked with Turkish turbans in miniature ; some have their slender spray hung with globes like alabaster, or flowers of the cowslip form : nor are their colours less varied than their shape ; whilst the foliage is equally beautiful in its apparent imitation of all the mountainous trees from the Scottish fir to Lebanon's boasted cedar, through all the tribe of pine, spruce, and larch, tamarisk, juniper, arbor vitæ, mournful cypress, and funeral yew. Stages for these plants should be made to imitate rocky mountains, and the effect would be a living landscape in miniature. A favourable spot should be selected in the shrubbery, and planted with native heaths, amongst which the exotic kinds could be placed during the favourable season of the

year. On the cultivation of foreign heaths, we shall only observe, that it depends more on care than art.

The British Botanist admits but of four distinct native species of heath, each of which has its variety; and almost every part of Europe abounds with this denoter of a poor soil. It is common in all the temperate parts of the vast Russian empire; and although it is only regarded for making brooms in warm climates, the inhabitants of the bleak and barren mountains of Scotland, and other northern countries, make it subservient to a great variety of purposes. The poorer inhabitants cover their huts or cabins with it instead of thatch, and it is often used to form the walls of their dwellings, by laying it alternately with a cement of earth.

It often forms the bed of the hardy Highlander. In most of the western isles they dye their yarn of a yellow colour, by boiling it in water with the green tops and flowers of this plant; and woollen cloth, boiled in alum water, and afterwards in a strong decoction of the tops, comes out a fine orange colour. In some of these islands they tan their leather in a strong decoction of it. They also use it in brewing their ale, in the proportion of one part malt to two of the young tops of

heath. Boethius relates that this liquor was much used by the Picts. The cottagers of heathy commons cut the turf with the heath on it, and after drying it, stack it for the fuel of their hearth and their oven. Bees collect largely both honey and wax from the flowers of the heath, but it is generally of a dark colour. Grouse feed principally on the seeds of the wild heath, for the seed-vessels are formed so as to protect the seeds for a whole year.

Cattle are not fond of heath, although goats and sheep will sometimes eat the tender shoots.

HOLLY.—ILEX.

Natural order, Dumosæ. Rhamni, Juss. A genus of the Tetrandria Tetragynia class.

“Sing heigh ho ! the holly, the holly.”

SHAKESPEARE.

“No tree in all the grove but has its charms,
Though each its hue peculiar ; paler some,
Some glossy-leaved, and shining in the sun.”

THE Greeks named this tree Ἀγρία (agria) ; which is supposed to be derived from ἄγριος, *immitis*, from its being armed with prickles.

The admirers of Virgil’s Pastorals will be reminded of the poetical contentions of Corydon and Thyrsis, when the *ilex* meets their view.

“Beneath a holm, repair’d two jolly swains :
Their sheep and goats together grazed the plains.”

DRYDEN.

French naturalists have made the holly the emblem of foresight, because, they say, that the foresight of nature is admirably exemplified in this beautiful tree, which, when growing in its natural forest, protects itself by

numerous leaves bristling with thorns, until it arrives to about the height of ten feet, when the leaves cease to be thorny, and are perfectly smooth and 'even, because it has no longer occasion to arm itself against an enemy who cannot reach higher ; but we reverence the holly branch with its spiny and highly varnished foliage, which reflects its coral berries, as an emblem that foretells the festival of Christmas, and the season when English hospitality shines in roast beef, turkeys, and the national pudding.

Tradition says, that the first Christian church in Britain was built of boughs ; and that the disciples adopted the plan, as more likely to attract the notice of the people, because the heathens built their temples in that manner, probably to imitate the temples of Saturn, which were always under the oak.

The great feast of Saturn was held in December ; and as the oaks of this country were then without leaves, the priests obliged the people to bring in boughs and sprigs of evergreens ; and Christians, on the twenty-fifth of the same month did the like ; from whence originated the present custom of placing holly and other evergreens in our churches and houses, to show the feast of Christmas is arrived.

This tree appears to have been formerly called *Hulver*, by which name it is still known in Norfolk, and *Holme*, in the southern counties; as appears by the name it has given to many places where it grows naturally, as the Holmwood between Horsham and Dorking. Mr. Evelyn says, that the vale near his house, in Surry, was anciently called Holmesdale. We presume, the name of Holly is a corruption of the word holy, as Dr. Turner, our earliest writer on plants, calls it *holy* and *holy-tree*; which appellation was given it, most probably, from its being used in holy places. It has a great variety of names in Germany, amongst which is *Christdorn*; in Danish, it is also called *Chirstorn*, and in Swedish *Christtorn*, amongst other appellations; from whence it appears, that it is considered a holy plant by certain classes in those countries.

The disciples of Zoroaster believe, that the sun never shadows the holly-tree. There are still some followers of this king of the magi to be found in the wilds of Persia, and some parts of India; who, when a child is born, throw in its face water which has been put in the bark of a holly-tree.

Pliny tells us, that Tiburtus built the city of Tibur, near three holly-trees, over which

he had observed the flight of birds that pointed out the spot whereon the gods had fixed for its erection ; and that these trees were standing in his own time, and must, therefore, have been upwards of 1,200 years old. He also tells us, that there was a holly-tree then growing near the Vatican, in Rome, on which was fixed a plate of brass, with an inscription engraved in Tuscan letters ; and that this tree was older than Rome itself, which must have been then more than 800 years (book xvi. chap. 44.). This author notices a holly-tree, in Tusculum, the trunk of which measured thirty-five feet in circumference, and which sent out ten branches of such magnitude that each might pass for a tree ; he says, this single tree alone resembled a small wood.

The holly grows to a considerable size, even as a timber tree, in this country, when permitted to stand. Cole tells us, in his "Paradise of Plants," that he knew a tree of this kind which grew in an orchard ; and the owner, he says, "cut it down, and caused it to be sawed into boards, and made himself thereof a coffin ; and if I mistake not, left enough to make his wife one also. Both the parties were very corpulent ; and, therefore, you may imagine the tree could not be small."

Bradley mentions, that he has seen holly-trees sixty feet in height, at a place called Holly-walk, near Frensham, in Surry. Dr. Withering says, that on the north of the Wrekin, in Shropshire, the holly-trees grow to a large size, and they are very common in the Chiltern division of Buckinghamshire. We have also observed it growing abundantly in some parts of St. Leonard's Forest, in Sussex, particularly in the neighbourhood of Handcross. We presume that many noble trees of holly would be seen in this country, but for the practice of cutting all the finest young plants to make coachmen's whips, thus leaving only the crooked branches or suckers to form shrubs.

The holly, when it stands detached and is left to nature, forms one of the most beautiful evergreen trees that this or any other country produces; its pyramidal form, its immoveable foliage, its bright deep-green colour, and brilliant vermilion berries, contrast happily with almost every tree and shrub which the forest or the grove affords.

In the shrubbery these trees have a good effect, when judiciously placed; and although we prefer the common holly in general, we recommend the variegated kinds as great enliveners to dark evergreens, as the yew, cy-

press, &c. They should have the box, or some dwarf shrub in front, and a dark background, whilst the common variety should be mixed with gayer neighbours; and the pale tints of the larch, which tower above its head, harmonize as well with this tree as does the waving birch or tremulous asp.

The variety with yellow berries was found wild near Walder Castle, as also at Wiston, near Buers, in Suffolk; it is a very ornamental tree in the shrubbery, as its berries at a distance carry the appearance of blossoms from the month of October to March.

Our nurserymen now offer us nearly fifty varieties of this plant, all of which may be propagated by grafting on a stock of the common sort. The most curious variety is that known by the name of Hedgehog holly, from its leaves being defended in all directions by thorns; this kind grows naturally in Canada; and Mr. Miller considered it a distinct species, and says it continues its natural character when raised from seeds. It was first planted in the Bishop of London's Garden, at Fullham, in the time of Compton, by Mr. George London, who is supposed to have introduced it from France. This ingenious nurseryman says, in his "Retired Gardener," 1706. "We have great variety of hollies

in England, and have brought them to more perfection than they are in any other part of the world."

Amongst the kinds of holly which we noticed in the Jardin des Plantes, at Paris, we were most pleased with a variety, with a very small pointed leaf, named *Aquifolium serratum*, and a second, with a very broad leaf, quite free from spines, which was called *Ilex balearica*.

Columella seems to have recommended the holly to the Romans, as a proper fence for gardens. In his tenth book he says,

"And let such grounds with walls or prickly hedge,
Thick set, surrounded be, and well secured;
Not perview to the cattle, nor the thief."

Evelyn tells us, that his garden at Say's Court was surrounded with an impregnable hedge of about four hundred feet in length, nine feet high, and five in diameter; "It mocks," says this worthy author, "the rudest assaults of the weather, beasts, or hedge-breakers;" and it was almost the only thing belonging to his garden that was not destroyed by the Czar of Muscovy. Mr. Evelyn had lent his house to Peter the Great, in order that he might be near the Dock-yard at Deptford, during his stay in England; and we are told that this im-

perial shipwright was so fond of being driven in a wheelbarrow over the box edgings and the parterres of the author of the *Sylva*, that they were entirely destroyed; "which" says he, "I can shew in my now ruined gardens at Say's Court (thanks to the Czar)."

Mr. Evelyn was evidently a good Christian, but he appears to have overlooked the passage in Scripture, which says,

"Put not your faith in princes;"

for it does not appear that the Emperor of Russia made him the least recompence for the devastation he committed, both in the garden and the mansion; and he certainly was an unrewarded slave to Charles the Second.

Mr. Evelyn informs us, that Lord Dacres had a Park in Sussex, environed with a holly-hedge, so as to keep in any game; and he adds, "I have seen hedges, or, if you will, stout walls of holly twenty feet in height, kept upright, and the gilded sort budded low, and in two or three places one above another, shorn and fashioned into columns and pilasters, architectonically shaped, and at due distance; than which, nothing can possibly be more pleasant, the berry adorning the intercolumniations with scarlet festoons and encarpa."

At the time this author flourished, landscape gardening did not exist, and all the gar-

dens of Europe were laid out on geometrical principles, therefore, these shorn hedges were well adapted to the formal and gloomy dignity of the gardens of that age of avenues, right angles, and octagons; yet we are of opinion with Mr. London, that this style is not altogether to be condemned, it is well adapted to the Palace of Versailles and of the Thuilleries, and all edifices which unite formality with splendour.

Few trees are better adapted for the lawn than the holly, as the colour, either of the darkest or the most silvered, contrast equally well with the turf, and when

——— “The hush’d fields
Put on their winter robe of purest white,”

It shines still more conspicuous; for the snows glide off the slippery leaves, as if dissolved by the fiery colour of its fruit, around which the feathered tribe crowd to claim the boon which nature has provided for them when other food is buried deep beneath the fleecy waters.

The holly, which forms a verdant pavilion for the chirping tribe, protecting them from the inclemency of the stormy season, forms also a snare for their destruction; for the fowler obtains a viscid substance from the bark of this

tree, which he prepares into birdlime, and thus entangles his prey.

This tree, which loves a cold loamy soil and a sheltered situation, will thrive also where the south-west sea-blasts cut most other trees as if mown with a scythe, nor does it refuse to grow on gravel, chalk, or rocky land; and we have often seen it thrive upon brick earth, as well as upon dry hot sand and sterile heathy commons; thus accommodating itself to almost every soil and situation in the kingdom. Grouping itself with the yellow-broom or furze, it shines unrivalled in the vegetable kingdom, particularly in the month of February. The holly is valuable as well as ornamental. The timber is the whitest of all the hard woods; and therefore preferred by the turner and engraver to most others, as well as by the cabinet-maker, when fashion permits the inlaying of coloured woods. It is often dyed black to imitate ebony; and it has long been in great demand at Tunbridge, in Kent, where it is manufactured into numerous fancy articles.

Deer feed upon the leaves in winter, and sheep browse upon it to their advantage.

Like the hawthorn, the holly sends forth its white flowers in May, and its berries, like the haws of the thorn, hang on the branches

all the winter, and remain in the earth two years before they germinate; unless when they have passed through the stomach of fowls, when they vegetate the first year. We have, therefore, only to give them a similar fermentation by art, which nature gives them in the body of birds, to enable us to raise young plants in one year instead of two. For this purpose, we are recommended to take a bushel of bran, and to mix it with the seeds in a tub or earthen vessel, and wet it with soft water, and let it remain undisturbed for ten days, when it will begin to ferment. It must be sprinkled occasionally with warm water to keep it moist, and in about thirty or forty days the heat of the moistened bran will put the berries into a state of vegetation fit for sowing in about a week after the fermentation has commenced.

March is the best season for sowing this seed, which may also be treated according to the direction given for raising hawthorns. September is the proper season for transplanting young hollies; but in cold or moist soils, they may be planted safely in the spring.

Mr. Evelyn says, he has raised hedges four feet high in four years, from seedlings taken out of the woods. This should induce us to make more frequent trials of raising fences of

this prickly plant; and, particularly, on hilly situations, where it would afford shelter to the shepherd and his flock, against either excessive heat or piercing storms.

Old medical writers tell us, that the ripe berries are relaxing, and astringent when dried; but it is not our intention to recommend the robbing of the feathered tribe, to the injury of the sons of Æsculapius, and, perhaps, of our constitutions at the same time; nor would we willingly be deemed credulous, in noticing the old customs of our forefathers, who trusted to a branch of holly for their defence against witchcraft; but this precaution has become unnecessary, since old ladies have lost their *charming* powers, and the spells of the youthful fair are too agreeable to be driven from us by a rod of holly.

The *Ilex Vomitoria*, commonly called the South-sea Tea, or Evergreen Cassine, is a native of West Florida, Carolina, and some of the warmer parts of Virginia, and principally found on the sea-coast. This species of holly was cultivated in England as long back as 1700, but the severe winter of 1739 destroyed most of the plants; but it has since been raised from seeds, and is found to resist the cold of our winters without protection, excepting that of neighbouring shrubs. It

rises to the height of ten or twelve feet, the flowers are produced in close whorls at the joints of the branches, near the footstalks of the leaves; they are of a white colour, and the fruit is a red berry, similar to the common holly. The tea, made by an infusion of these leaves, is almost the only physic used by the natives of some parts of the New World.

At a certain time of the year these people come in droves, from a distance of some hundred miles, to the coast, for the leaves of this tree; when they make a fire on the ground, over which they place a vessel of water, and throw into it a large quantity of these leaves. They then seat themselves round the fire, and take large draughts of the infusion until it operates as an emetic. In this manner they continue to physic themselves for two or three days; and when their stomachs are sufficiently cleansed, every one takes a bundle of the branches with him to his habitation.

HONEYSUCKLE, OR WOODBINE. — LONICERA PERICLYMENUM.

*Natural order, Aggregatæ. Caprifolia, Juss.
A genus of the Pentandria Monogynia class.*

“ Copious of flowers, the woodbine, pale and wan,
But well compensating her sickly looks
With never cloying odours, early and late.”

COWPER.

——— “ Or the woodbine wild,
That loves to hang, on barren boughs remote,
Her wreaths of flowery perfume.”

MASON.

THE Greeks named this vine Περικλυμενον, and the modern Greeks call it, Περιπλόκας. It received the generic name of *Lonicera*, as a compliment from Plumier to Adam Lonicer, a physician at Frankfort. We name it Woodbine, because it winds itself as it were in wedlock to every tree and shrub in its neighbourhood, which it graces by its well attired

branches in return for the support it borrows;
from hence it is styled the Bond of Love.

“The woodbines mix in am’rous play,
And breath their fragrant lives away.”

In the time of Edward the Third, it appears to have been emblematical of true love, as Chaucer, the father of English poetry, says,

“And tho that were chapèlets, on hir hede,
Of fresh wodebird, be such as never were
To love untrue, in word, in thought, ne dede;
But ay stedfast; ne for plesance ne fere,
The that they shulde hir hertes all to tere,
Woud never flit, but ever were stedfast,
Till that hir lives there assunder brast.”

This climbing plant always turns from east to west, and so firmly does it hold its supporter in embrace, that we often see young trees and branches indented like a screw by the pressure. As the gentle Desdemona clung to the dark warrior, so have we seen the delicate and supple stalks of the woodbine endeavour to embrace the trunk of the sturdy oak, and in the bold attempt it is often seen thrown off to perish on the ground, unless caught by humbler shrubs, who seem proud to display the flowery festoons which the monarch of our woods had rejected. So have we seen modern Desdemonas turn

from support within their reach, aspiring to climb by means too large for their grasp; they have been drawn up, in weak hopes, by a slight hold, which the first winds severed throwing them to the earth, too feeble to catch the most lowly plant.

We love to see shrubs "o'er-canopied with luscious woodbine," but in the oak of the forest its beauties wither in the shade of its too grand supporter.

The name of Honeysuckle, we presume, was given to this plant, from the trick of children, who draw out the trumpet-shaped corollas from the calix, to suck the honey from the nectary.

This flower has what is termed a tubulose nectary, and the sweet liquid laying at the bottom is secure from the reach of the industrious bee; but the hawk-moth, a species of the sphinx, hovers over these flowers in the evening, and with its long tongue extracts the honey from the very bottom of the flower. Other insects that have not the advantage of so lengthened a tongue, tap the tubes of the flower, by making a puncture towards the bottom, and then revel in the luxurious sweet.

The nectary of a flower is that part of the blossom which contains a liquid honey, and we are inclined to think that this saccharine

juice is distilled from the plant, and conveyed to the nectary, for the double purpose of giving nourishment to the parts of fructification and decomposition to the farina,

“These, nature’s works, the curious mind employ,
Inspire a soothing melancholy joy.”

The woodbine has a light and elegant, but negligent air, better calculated to ornament rural groves than to embellish stately gardens, and a more suitable climber for the rustic porch than the modern portico. Cunningham has given it to the Cottage of Content.

“Green rushes were strew’d on her floor,
Her casement sweet woodbines crept wantonly round,
And deck’d the sod seats at her door.”

The perfume of the honeysuckle being of the most agreeable kind, it should be frequently met with in the shrubbery; when planted near the fore-ground it ought to be kept cut as a shrub, which, as well as giving neatness, ensures a succession of flowers. In the wilderness walks, it should have liberty to climb the trees, and hang its wreaths from branch to branch; and where the ivy gives verdure to the bare trunk, there should the woodbine display its blossoms and shed its odours; as also over the rural arbours of the

present day, as it did o'er those of Shakspeare's.

“ Beatrice, who e'en now
Is couched in the woodbine coverture.”

.Much Ado.

The nurserymen of this country now offer us eighteen distinct species of the *Lonicera*, besides many varieties of the common woodbine. The Dutch honeysuckle, *Lonicera Belgica*, may be trained with a stem, and formed into a head like a tree; the flowers of this variety are of a reddish colour on their outsides, and yellowish within, of a very delightful odour. There are two varieties of the Dutch honeysuckle, one of which is called the Long-blowing, as it blossoms in June, July, and August; the other succeeds it, and is therefore called the Late Red-blowing Honeysuckle, *L. serotina*. Both of these should be planted in considerable quantities. The latter kind has only been introduced about a century; for in 1715 it was esteemed a great curiosity, and is supposed to have been first brought to this country by the Flemish florists, who were then in the habit of coming over annually with plants for sale.

The Virginia trumpet honeysuckle, *Lonicera sempervirens*,⁴⁸ was cultivated in this country by John Tradescant, jun. as long back

as 1656, and although it is without odour, it is a desirable evergreen climber, the bright scarlet flowers being so ornamental from May to August. This kind of honeysuckle requires a south aspect, and a sheltered situation. The branches being weak and rambling, it is generally trained to a wall; but it has a better effect when its branches are interwoven with the cypress, or any other evergreen, which will shelter it, from the north, and support its gay trumpets to advantage.

The common honeysuckles will grow in almost any soil or situation, and there are few inmates of the shrubbery more desirable than these odoriferous stragglers, which perfume the air to a great distance, particularly in the morning and evening. They are easily propagated, either by layers or cuttings; but the latter are preferred. The cuttings should have four joints, three of which should be buried in the earth, and the fourth above the surface, from which the shoots are produced. September is the best month for planting the woodbine cuttings. How greatly would our hedges be improved by a few cuttings being stuck in the ground; how little the trouble, the expence none,—but the delightful air would well repay the labour.

We should have passed over the medicinal

qualities of this plant, had we not accidentally opened the work of a student in physic, who flourished in London, in the year 1681; and as we conclude it is but little known to the students of 1823, we extract it for the sole purpose of benefiting the faculty—*by a laugh*.

This learned Æsculapian author says, under the head ‘Woodbind,’ “It is a plant so common, that every one that hath eyes knows them; and he that hath none cannot read a description if I should write it. Doctor Tradition, that grand introducer of errors, that hater of truth, that lover of folly, and that moral foe to Doctor Reason, hath taught the common people to use the leaves of flowers of this plant in mouth waters; and by long continuance of time hath so grounded it in the brains of the vulgar, that you cannot beat it out with a beetle. All mouth waters ought to be cooling and drying, but honeysuckles are cleansing, consuming, and digesting, and therefore no ways fit for inflammations: Thus, Doctor Reason. And, if you please, we will leave Doctor Reason awhile, and come to Doctor Experience, a learned gentleman, and his brother. Take a leaf and chew it in your mouth, and you will quickly find it likelier to cause a sore mouth, or throat, than to cure it. It is an herb of *Mercury*,

and appropriated to the lungs; the celestial *Crab* claims dominion over it, neither is it a foe to the *Lion*: if the lungs be afflicted by *Jupiter*, this is your cure."

In later days, wisdom has shone equally conspicuous in one of the physicians of the celebrated Johanna Southcott.

"There was a time, when we beheld the quack,
On public stage, the licensed tribe attack;
He made his labour'd speech with poor parade,
And then a laughing zany lent him aid;
But now our quacks are gamesters, and they play,
With craft and skill, to ruin and betray:
With monstrous promise they delude the mind,
And thrive on all that tortures human kind.
Void of all honour, avaricious, rash,
The daring tribe compound their boasted trash."

CRABBE.

The leaves of the woodbine are the favourite food of the goat, hence the French have named this plant, *Chèvre-feuille* (Goat's-leaf.)

HORNBEAM, OR HARDBEAM-TREE.
—CÁRPINUS.

*Natural order, Amentaceæ. Balaniferæ, Juss.
A genus of the Monœcia Polyandria class.*

—“ Art thrives most
Where commerce has enrich’d the busy coast.
He catches all improvements in his flight,
Spreads foreign wonders in his country’s sight.”
COWPER.

THE introduction of so many exotic trees and shrubs within this last century has banished some of our native plants from the grove, but fashion, who reigns with arbitrary power in these dominions, has entirely swept away the hornbeam, which composed the labyrinth, the maze, the alleys, the verdant galleries, arcades, porticoes and arches of our forefathers; and which formed the leafy walls that divided their stately gardens into stars, goose-foot avenues, and devices as numerous as geometrical figures are various. These have all been banished with the hornbeam, which taste has outlawed from the modern plantation for having so long usurped a pre-

cedency in the groves of our ancestors; and it is now deemed high treason, in the statutes ~~alamode~~, to name either this tree or a right angle in the dominions of a modern British gardener.

“ Say, shall we muse along yon arching shades,
Whose awful gloom no brightening ray pervades?”

The clipping of trees, we are told by Martial, was first introduced by Cneius Matius, a friend of Augustus; and in the account which Pliny the younger gives of his Tusculan gardens, we read that the trees were planted to form circles and semicircles, and that the box-trees were cut with shears, so as to form animals, obelisks—and even the name of Pliny was represented in verdant box. This style of laying out gardens seems to have been followed on a larger scale by Le Notre, who planned the celebrated gardens of Versailles, which cost Louis XIV. between eight and nine hundred thousand pounds sterling; and which are well calculated to display courtly pomp, and that kind of magnificent revelry which this monarch indulged in. But to us this heavy grandeur appears more gloomy than the thickest forest, excepting when the alleys and walks are crowded with company, and the waterworks in full action; then every beholder must be

struck with the splendour of the scene, which the dress of the French ladies is particularly calculated to improve; for the gaiety of their costume relieves the sombre appearance of the trained hornbeam and clipped elm. Their light gauze, gay ribbons, feathers and flowers, substitute blossoms; for whilst one seems to display a basket of roses on her head; others carry nodding tyruses of lilac, or waving laburnum; and with the mixture of poppies, nasturtiums, and sunflowers, with which they are bedecked, you forget that the trees are without blossom; for here you see the gay rank of scarlet soldiers, and there files of green elms; here wave the winged leaves of the acacia, there bows the no less pliable head of the courtier; here dances the jet d'eau in air, there drops to the earth the well-taught curtsying belle; here monsters spout out water to cool the air, while flattery as abundantly sends forth her streams to refresh the vain. In one spot we see the proud officer flaunting round the brazen image of Venus; whilst the opposite angle shows the sentimental dame reclining on the pedestal of Mars or Jupiter, Agricola, a German author, says, this scene gave him a foretaste of Paradise. But when we left it, and entered that part of the gardens which has been lately laid out in the style of an

English shrubbery, we felt as much relieved as one who escapes from the drawing-room on court days to his own domestic hearth.

“For many a floweret blossoms there, to bless
The gentle loveliness whose charms imbue
Its border.”

Bradley, who flourished in this country when the hornbeam was in its highest estimation, says, “Versailles, is the sum of every thing that has been done in gardening.” The gardens of the Tuilleries and the Champs Elysées were modelled after the gardens at Versailles, and the taste soon reached this country. Evelyn, in his discourse on the hornbeam-tree, says, “That admirable espalier hedge, in the long middle walk of the Luxembourg garden at Paris, than which there is nothing more graceful, is planted of this tree; and so was that cradle, or close walk, with that perplex canopy which lately covered the seat in his Majesty’s garden at Hampton Court.” This author speaks in terms of ecstasy of the clipped hedges at Old Brompton Park, then occupied by London and Wise, two eminent nurserymen of that age of clipping and cutting.

Lord Bacon seems to have been the first who tried to reform the national taste: “I

do not like," says this great man, "images cut out of juniper or other garden stuff; they are for children; and as for the making knots or figures, with divers coloured earths, they be but toys."

G. Mason considers the efficacy of Verulam's ideas to have been the introduction of classical landscapes, which banished the tree whose birth and parentage we are about to relate. Its education and death having already been noticed, we shall extract what Gerard has registered as to its name and early residence in these kingdoms. He says, "The hornbeame-tree is called in Greeke *Zugia*, which is as if you should say *coniugalis*, or belonging to the yoke, because it serveth well to make *ζυγία* of; in Latin *Juga*, yokes, wherewith oxen are yoked together, which are also, even at this time, made thereof in our owne countrie; and, therefore, may be Englished yoke elme. It is called of some *Carpinus*, and *Zugia*; it is also called *Betulus*, as if it were a kind of birch; but myselfe better like that it should be one of the elmes. The hornbeame-tree groweth plentifully in Northamptonshire; also in Kent, by Gravesend, where it is commonly taken for a kind of elme. In English, it is called

Hornbeame, Hardbecame, Yoke/elme, and in some places Witch hasell."

The generic name of this tree is derived from *carpere* (to crop); and the English name of Hardbeam and Hornbeam, from the hard and horny nature of the wood when old. It is sometimes called the Horse-beech, from the resemblance of the leaf.

The French call this tree *Churme* and *Charmille*; and most of the cabinets and divisions of their great gardens are formed of these trees.

It is very common in many parts of England; but is rarely suffered to grow to a timber tree, being generally pollarded by the country people: but Dr. Hunter says, he has seen some of these trees in woods upon a cold stiff clay, that have been nearly seventy feet high, with large noble stems, perfectly straight and sound.

Its propagation is recommended on cold barren hills, and in such situations where few other trees will prosper; and it is found to resist the winds better than most other timber; nor is it slow in growth: but it is recommended to raise it from seed, upon the same soil and situation that it is intended to be planted on. The seeds should be sown in the autumn, soon after they are

ripe; for if they be kept out of the ground until the spring, the plants will not come up till the following year.

The foliage of the hornbeam is very similar to that of the elm, strongly nerved and of a bright green; it begins to expand about the end of March, and it often remains on the branches until the spring, thus forming an excellent shelter for more tender trees. The flowers are in full blossom about the end of April: the male flowers are disposed in a cylindric ament, and hang like the catkins of the hazel; the female flowers or ament arise from a leafy calix, but having an appearance like a young hazel-nut; and from whence, and its catkins, it has been called Wych-hazel: but the female flowers are also disposed in a long ament, which gives them a nearer resemblance to hops; and on which account, one variety is called the Hop Hornbeam, *Carpinus Ostrya*, or *Orientalis*. This variety was first cultivated in England, in 1739. It was first observed in Italy, and is very common in Germany, growing with the common hornbeam.

The Virginian flowering hornbeam, *C. Americana*, was first introduced in 1812. Linnæus observes, that the timber of the hornbeam is very white; and tough, and

harder even than that of the hawthorn, and capable of supporting great weights. He also tells us, that the inner bark is much used in dyeing wool yellow.

The hornbeam, by its mode of throwing out its branches, preserves itself well from the buttings of deer ; so that clumps of this tree are proper in parks, both on account of their beauty and shelter.

JASMINE. — JASMINUM.'

Natural order, Sepiariæ. Jasmineæ, Juss. A genus of the Diandria Monogynia class.

“ The jasmine, throwing wide her elegant sweets,
 The deep dark green of whose unvarnish'd leaf
 Makes more conspicuous, and illumines more
 The bright profusion of her scatter'd stars.”

COWPER.

THIS sweet emblem of amiability is always acceptable wherever we meet it. It graces alike the lowly casement of the lone widow, and the proud parterre of the rich and gay; the bosom of the village lass, and the oriental vase of the saloon. Its modesty pleases, and its fragrance charms, in all situations; like those whose happy dispositions and amiable manners seem to make them the bond of society, by the grace and facility with which they accommodate themselves to all situations and circumstances. The pretty face of the jasmine flower is only surpassed in loveliness, by the fair whose countenance is brightened by amiability.

“ And brîdes, as delicate and fair
 As the white jasmine flowers they wear,
 Ha-h Yemen in her blissful clime.”

T. MOORE.

The common jasmine, *Officinale*, which grows naturally at Malabar, is registered in the Hortus Kewensis as a native of the South of Europe; but we are opinion that it did not leave the East until the taking of Constantinople by the Turks, whose fondness for flowers would induce them to transport it to the land they conquered in 1453. It certainly would ~~not~~ have passed unnoticed by Pliny and other ancient authors, had it either grown naturally, or been introduced to that country previous to their time. Dioscorides is the only Greek author that notices it; and as he has given no description of the plant or flower, but only tells us that the Persians obtained an oil from a white flower, with which they perfumed their apartments during their repasts, it is probable he only became acquainted with the oil of jasmine during his attendance as physician on Antony and Cleopatra, in Egypt, whose unbounded luxury would naturally call this essence from the land of odours. This author calls it *Ιασμίνον*, from *ἰου* (*viola*), and *ὀσμή* (*odor*), on account of its fragrance; and from whence the name of Jas-

mine has been copied by all European languages. In early days this was mutilated by the English into Cethsamine, Jesemin, and Jasme. It is also the Jasmin, as well as Kajan, and Zambach of the Arabians. At what time this agreeable plant first perfumed the British atmosphere is uncertain; Mr. Aiton says, in 1548; but we consider it to have been much longer acquainted with our soil, as Dr. Turner calls it *our common jessmine* in his work, part of which was printed in 1557; and it appears to have been so common in the time of Gerard, as to have been thought a native plant by some persons. This excellent author says, "Gelsemine is fostered in gardens, and is vsed for arbors, and to couer banquetting houses in gardens; it groweth not wilde in England, that I can vnderstande of, though master Lyte be of another opinion: the white jasmine is common in most places of Englande."

If we may believe a Tuscan tale, we owe our thanks to Cupid for the distribution of this pretty shrub. We are told that a Duke of Tuscany was the first possessor of it in Europe, and he was so jealously fearful lest others should enjoy what he alone wished to possess, that strict injunctions were given to

his gardener not to give a slip, nor so much as a single flower, to any person. To this command the gardener would have been faithful, had not the god of love wounded him by the sparkling eyes of a fair but portionless peasant, whose want of a little dowry and his poverty alone kept them from the hymenical altar. On the birth-day of his mistress, the gardener presented her with a nosegay; and to render the bouquet more acceptable, he ornamented it with a branch of jasmine. The *Povera Figlia* wishing to preserve the bloom of this new flower, put it into fresh earth; and the branch remained green all the year, and in the following spring it grew, and was covered with flowers; and it flourished and multiplied so much under the hand of the fair nymph's cultivation, that she was able to amass a little fortune from the sale of the precious gift which love had made her; when, with a sprig of jasmine in her breast, she bestowed her hand and her wealth on the happy gardener of her heart. And the Tuscan girls, to this day, preserve the remembrance of this adventure, by invariably wearing a nosegay of jasmine on their wedding-day; and they have a proverb, which says, that a young girl, worthy of wearing this nosegay,

is rich enough to make the fortune of a good husband. *

Let us then cultivate more abundantly what love has scattered so happily ; for the supple and pliant branches of the jasmine accommodate themselves to numerous situations in the shrubbery.

“ Here jasmīnes spread the silver flower,
To deck the wall, or weave the bower.”

COTTON.

They should be woven into the trellised arch or alcove, climb the palisades, rest on the branches of the broad-leaved laurel, cover the dead wall, and run gaily wild over the shrubs of the wilderness walks ; whilst, obedient to the scissors of the gardener, they are formed into bushy shrubs and little trees for the near approach to the dwelling, where in the morning and evening their star-topped tubes send forth a shower of odours that embalm, refresh, and purify the surrounding air.

“ Many a perfume breathed
From plants that wake when others sleep,
From timid jasmine buds, that keep

* As this story is told of a Grand Duke of Tuscany, in 1699, we conclude it was the Goa jasmine, and not the common sort.

Their odour to themselves all day,
 But, when the sun-light dies away,
 Let the delicious secret out
 To every breeze that roams about."

T. MOORE.

"Then how serene ! when in your favourite room,
 Gales from your jasmines soothe the evening gloom."

CRABBE.

From the tube of this eastern flower the bee extracts its most exquisite honey ; and the painted butterfly is never seen to more advantage, than when resting on the delicate petals of the white jasmine.

When the jasmine was first introduced into France, it was thought to require all the heat they could give it ; it next occupied a place in the orangery, and at length exposed to the open garden, where it thrives as freely as a native plant, and still holds the situation of a favourite with the Parisian belles, and is always the most saleable bouquet that *les dames de la halle* bring to their gay market.

We have often been astonished that our cottagers, who possess little gardens, should not cultivate flowers for sale, particularly the jasmine, which is so hardy and so easily propagated ; and with which they might even form their fences, or suffer it to run over their hedges, without taking away any part of their potatoe ground.

In the market they would find one bunch of jasmine flowers would bring them as much money as three cabbages or a bunch of turnips.—As long back as the time of Charles the Second, Evelyn says, “Were it as much employed for nosegays, &c., with us, as it is in Italy and France, they might make money enough of the flowers ; one sorry tree in Paris, where they abound, has been worth to a poor woman near a pistole a year.” And at the present time a great deal of money is made by the nurserymen in that neighbourhood, who trim them up with a head on a single stem, and then pot them, and send them to the flower-market covered with blossoms, where they soon find customers amongst those who are wise enough to prefer familiar beauty to costly rarity ; and you see it there flourishing equally in the cobbler’s window and the palace balcony. The Turks cultivate the jasmine for the sake of the branches, of which the tubes of their summer tobacco-pipes are as invariably made, as those for the winter are formed of the cherry-tree.

As the jasmine does not ripen its seed in our climate, it is increased by laying down the branches, which take root in one year ; which may then be cut from the old stock, and planted where they are to remain. It is also

propagated by cuttings, which should be planted early in the autumn, and the earth covered with sand, ashes, or sawdust, to keep the frost from entering the ground.

In situations where it is necessary to prune this plant, it must never be done until the end of March, or when the frost is past. It should also be observed, that the flowers are always produced at the extremity of the same year's shoots, which are often cut off in the summer, by those who are ignorant of its nature; and thus the plant is deprived of the power of treating us with its fragrant flowers.

The common yellow jasmine, *J. fruticans*, is a native of the South of Europe; yet it did not reach this country so early as the white jasmine, as Gerard tells us, in 1597, that it had not then been seen in this country; and Mr. Martyn is therefore mistaken in his statement, that it was cultivated by Gerard in that year.

Parkinson tells us, in 1629, that the yellow jasmine "will well abide in our London gardens, and any where else."

This shrub is easily increased by suckers or layers; but being deficient of odour, it is much less cultivated than formerly. Sheep eat the leaves and young branches of this shrub with great avidity.

The Italian yellow jasmine, *J. humile*, produces larger flowers than the common yellow jasmine, and is therefore preferred in the shrubbery; where it requires a south aspect and sheltered situation. It was first cultivated with us in 1730, but its native soil still remains unknown; it acquired its name from being sent out of Italy with oranges, trees, &c.

This kind is generally propagated by budding, or inarching it upon the common yellow sort, as these plants are more hardy than those raised by layers.

We shall pass over the more tender species of jasmines, which are the inmates of the conservatory; only observing, that the florist cannot bestow his labour on a more delightful genus of plants. We now reckon eleven distinct species of jasmines, besides varieties of several of them.

The ancients employed the berries of the jasmine in their pretended divinations; and the oil obtained from the flowers was used in the baths of females.

JUDAS-TREE. — CERCIS.

Natural order, Lomentaceæ. Leguminosæ, Juss.

A genus of the Diccandria Monogynia class.

“ And where Judæa’s tree its bloom expands
 Of purple hue, to fancy’s eye it shows
 The fertile banks where hallow’d Jordan flows.”

DELILLE.

If this tree possessed no other recommendation to a situation in the shrubbery, than that of being the identical species of tree on which Judas Iscariot hanged himself, we would have passed it over in neglect, however we might have been condemned by those credulous devotees who often believe the absurdities which have had no other birth than that given to them, by their own lunatic brain.

Gerard, who is less given to superstitious stories than most authors of his day, says, “ This is the tree whereon Judas did hang himself; and not upon the elder-tree, as it is said.” At that period, it had no other Latin

name than that of *Arbor Judæ*; and Parkinson observes, in 1640, that “we have no other English name to call it by than Judas-tree, until some other can impose a more apt for it.” We have been told of an impudent fellow, who makes money by christening the fruit-trees of other nurserymen with names of his own; and thus, not only passing off the offspring of others’ industry for his own progeny, but creating a second name for every apple and pear that leaves his marshy grounds. We are most desirous to see this handsome tree more frequent in our plantations; and sooner than it should be lost for want of a name, we would beg one from the Castilians, who call it *Arbold Amor*. (Tree of Love). The French name it *Arbre de Judée*. It is, therefore, probable that we received both the tree and its name from that country, where they have now bestowed a second name on it; viz. *Gainier*, from the likeness the pods bear to the sheath of a knife: but as the common shape of their knives differs so materially from those of our own country, their sheaths would not suit us; therefore, we object to their new appellation for this tree, and henceforward call it Tree of Love, with a hope that it will oftener flourish by the Tree of Life.

This tree reaches about the same height as the laburnum ; with which, and the guelder rose, it makes an admirable group, as its papilionaceous flowers, being of a rich purple, contrast delightfully with the gold colour of the one, and the snowy balls of the other. Its flowers appear in May, before the leaves have fully expanded ; and they come out of the old branches, and often from the stem of the tree, in large clusters. It is also a desirable neighbour for the hawthorn, flowering at the same time, and blending purple with silver in the happiest manner. The foliage is scarcely less ornamental than the flowers, as its form and colour are peculiar to this tree alone ; the leaflets being reniform and alternately pinnate, of a pale bluish-green on the upper surface, and sea-green underneath. And it is observed, that they are never injured by insects ; but the birds are fond of the flowers, and often destroy them when fully open. The bark on the branches is of a purplish brown, and the branches grow alternately, like the leaves. The French gardeners often prune and shorten the branches, which renders the tree more productive of flowers. It loves a light soil and a sunny situation ; and grows so freely in the South of France, Spain, and Italy, as to be considered a native of

these places by modern travellers, although the ancients do not appear to have noticed it. It grows naturally in Japan, and was cultivated by Gerard, at Holborn, in 1596, who does not mention it as a rare tree; therefore its introduction to this country most probably was much earlier than his time.

The flowers of the Judas-tree are frequently eaten in salads, from their having an agreeable poignancy. The wood of this tree is beautifully veined with black and green; and, as it takes a fine polish, it would be an acquisition to the cabinet-maker. There are varieties of this tree with white flowers, and also with flesh-coloured blossoms, but they have not the beauty of the bright purple kind; and we possess so few trees that yield a purple or blue flower, that it should be cultivated more particularly on that account.

These plants are propagated, by sowing their seeds upon a moderately hot bed, towards the latter end of March, or in a warm sunny border; and the young plants require a slight protection from the frosts of the following winter.

We have introduced a species of this tree from North America, called the Canada Judas-tree, *Cercis canadensis*. It is also named the Red bud-tree, from the colour of the flower-

buds in the spring ; but this tree is not so ornamental, either by its flowers or foliage as our favourite tree of love. The latter species was introduced in 1730. The young branches are said to dye wool of a very fine nankeen colour.

IVY. — HEDERA HELIX.

*Natural order, Hederaceæ. Caprifolia, Juss.
A genus of the Pentandria Monogynia class.*

“ I love the ivy-mantled tower,
Rock’d by the storms of thousand years.”

CUNNINGHAM.

THIS symbol of a generous friendship
attaches it self generally to the wretched.

“ Thus stands an aged elm, in ivy bound,
Thus youthful ivy clasps an elm around.”

PARNELL.

And often when death itself has smitten its protector, it restores to him again the honours of the forest or the shrubbery, where he lives no longer, by decorating his sapless branches with festoons of undecaying verdure and garlands of winter flowers. It seems to cling closer to the trunk, screening its death-struck supporter by its glossy foliage, as if to prevent the fatal blow of the axe.

In this situation the black-headed yellow-hammer loves to nestle, giving cheerfulness to the shade by its bright plumage.

The ivy so much revered by the ancient bacchanalians, was called by the Greeks *Κισσός* and *Κιττός* (*kissus* and *kittus*), from an infant boy of that name, whom it is pretended that the god of wine transformed into this plant. The Athenians called Bacchus himself *Kittus*. According to Pliny, he was the first that wore a crown, and this crown was composed of ivy. Silenus the demi-god, who became the foster-father of Bacchus, is also represented as wearing a coronet of ivy, as may be seen in an antique statue (No. 468), in the Louvre, at Paris. We are told that Silenus was crowned with, and wore a wreath of flowers. This mistake we presume has originated from the ivy leaves being formed into rosets, and a cluster of ivy berries placed in the centre of each, with which his temples are surrounded, and which, in diminutive-sized antique groups of bacchanalians, can only be distinguished from flowers by close inspection, and comparison with those on a larger scale.

At the marriage ceremonies of the Greeks, when the young couple arrived at the temple, the priest presented them with a branch of ivy, symbolical of the tie which should unite them; and the omission of which, at the wedding of Proserpine, was said to cause the Cocytus to flow only with waves of tears.

The metamorphosis of *Arctes's* mariners into dolphins, and his vessel into a forest, by *Bacchus*, is too elegantly described by *Ovid* not to be recalled to mind when we see this climber ascending lofty trees.

“ The mighty miracle that did ensue,
Although it seems beyond belief, is true.
The vessel, fix’d and rooted in the flood,
Unmoved by all the beating billows, stood; .
In vain the mariners would plough the main
With sails unfurl’d, and strike their oars in vain;
Around their oars a twining ivy cleaves,
And climbs the mast, and hides the cords in leaves;
The sails are cover’d with a cheerful green,
And berries in the fruitful canvass seen;
Amidst the waves a sudden forest rears
Its verdant head, and a new spring appears.”

Some ancient writers would have us believe that the ivy was first brought into Greece by *Bacchus*, from *Thebes*, which is said to have been the birth-place of the jolly god.

Alexander the Great, who could transplant whole nations with ease, could not, it is said, with all his efforts, make the ivy of Greece grow in the vicinity of *Babylon*. It is related that when he visited the mountain where *Bacchus* was supposed to have been brought up, that his army saw the ivy for the first time since they had left *Macedonia*, to over-

run the east; and that at the sight of this plant, which recalled the endearing remembrance of their country, they immediately began to make themselves crowns of its branches, and to sing hymns in honour of Bacchus.

Pliny tells us that when Alexander returned from India, all his soldiers wore chaplets of ivy on their heads; and it is generally supposed that the too frequent libations which the son of Philip made to the god of wine, caused his early visit to the shades of Pluto.

Crowns of ivy were consecrated to Apollo before the metamorphosis of Daphne into a bay-tree, and Virgil says,

“ Fierce tigers Daphnis taught the yoke to bear,
And first with curling ivy dress’d the spear.”

Past. iv.

The ivy, which of old crowned alike the brow and the bowl of Bacchus, has been ingeniously used, in later times, to represent faithful friendship; and a sprig of this plant, with the pathetic device, “ I die where I attach myself,” cannot fail of being understood, as well as one which was adopted by the friend who followed the fortunes of an elevated exile, whose device was ivy entwining a felled tree, surrounded by the motto, “ his fall cannot detach me.”

It is recorded that Ptolemy Philopater ordered the figure of a leaf of ivy to be imprinted on the Jews who forsook their religion. When this heathen monarch visited Jerusalem, the Jews forcibly prevented his entering their temple; for which insolence the tyrant determined to extirpate the whole nation, and ordered an immense number of Jews to be exposed in a plain, and trodden under the feet of elephants; but, by a supernatural instinct, the generous animals turned their fury not on those who had been devoted to death, but upon the Egyptian spectators. This circumstance terrified Philopater, and caused him to behave with more than common kindness to a nation that he had so lately devoted to destruction, and on which account, we presume, he upheld their religion.

It is to be feared that we should be taken for a nation of bacchanalians, were all those who have dissented from the church to distinguish themselves by a sprig of ivy on their forehead. •

We presume that the ancients merely selected the ivy, as emblematical of youth and freshness, to represent Bacchus who is thus described by Ovid: •

• Opheltes heard my summons, and with joy
Brought to the shore a soft and lovely boy.

- With more than female sweetness in his look,
Whom, straggling in the neighb'ring fields he took.
With fumes of wine the little captive glows,
• And nods with sleep, and staggers as he goes."*

It is; but natural to suppose that the god who presided over their wine should be a favourite image, and that they should therefore hold the ivy in superstitious reverence. It was pretended by them that a cup formed of the wood of ivy, would prove the purity of wine, which, by means of its pores, would consume the wine, and leave the rejected water in the vase, free from mixture.

It is singular that the ancients should select a crown for the god of wine from a plant to which the wine is said to have so strong an antipathy.

- "The prudent will observe what passions reign
In various plants (for not to man alone,
But all the wide creation, nature gave
Love and aversion). Everlasting hate
The vine to ivy bears."*

It is easy to make ourselves acquainted with those supposed antipathies of plants, as by attending to nature we should find, that two climbing plants cannot well exist on the same spot; their roots being of a similar nature, would defraud each other of their natural nourishment, and the prop which they seek

to climb would be overpowered, and the vine would perish in the continual shade of the ivy; therefore, the one has been wisely ordained to flourish in the sun, and the other to grace the shade. Man cannot, therefore, bring together with advantage what has been separated by the Creator in infinite wisdom.

Plants are often extolled or condemned, as they are brought forward by celebrity or kept back by caprice. We introduce varieties whose virtues are undiscovered; and suffer others to languish uncultivated on the bosom of the desert, whose beauties or qualities have not been sanctioned by the hand of fashion.

The fate of man is similar. An accidental circumstance often sets mediocrity of talent upon a tottering pinnacle; whilst superior ability decays unseen and unknown in a neglected shade, or a single accident of fortune keeps him from the society he was ordained to ornament. Like the ivy, he can exist when he has fallen; but, like this plant, he produces neither flowers nor fruit, unless supported to a height above the level of lowly herbs.

Of the virtues of ivy little is known. Some pretend that it prevents intoxication; and hence it entwined the brow of Bacchus to

keep off the fumes of wine. Cato directs that it should be given to cattle when other fodder is scarce; and we have known it given to sheep with apparent advantage, at a season when the snow had buried other green food.

The ivy is, as generally as improperly, styled a parasitical plant. We consider it merely a fixing climber, and that parasitical plants are such, as not only subsist entirely on the juices of the branches of other trees, but which have no situation allotted them on the earth, as the mistletoe and several others. The ivy draws its nourishment from the earth, as well as the oak or the elm to which it clings. The filaments which it sends forth from its branches are merely grapples, by which it fixes itself to the uneven part of the bark of trees or stone buildings; and that it receives no nourishment from these supposed roots is evident. For if the roots which enter the earth be destroyed, the plant will decay notwithstanding the numerous fixtures it has made, but not so when trailing on the earth; then these filaments become roots like other plants that are propagated by layers, and it can be separated from the parent plant without danger. The *Bignonia radicans*, Ash-leaved trumpet flower, adheres to buildings and trees by numerous thread-fibres in the same

manner as the ivy; but this elegant North American climber has never been considered a parasitical plant. It is true, that the ivy is often known to fix its root in the decayed trunk of a tree or in the crevices of old buildings, but other plants do the same. We have found a hazel-tree growing on the top of a church tower at Henfield, in Sussex; an apple-tree on the leads of Romsey church, in Hampshire; a Scotch fir on a stone building called Gog and Magog, near Petworth; and we have gathered flowers of the valley, which were growing out of the crevices on the highest pinnacle of the church of St. Sulpice at Paris. These were all offsprings of accident and not parasitical plants. . . .

That ivy must injure young growing timber by confining its trunk too closely, and by also drawing the same juices, is probable and generally admitted; but in some situations it has secured timber also by preserving the trunk from those severe frosts, which by congealing the sap and causing it to expand, often split the body of the tree, and thus render the timber only fit for fire-wood. We are not without instances of trees having actually perished when they have been stripped of this protecting leaf, and suddenly exposed to cold.

In ancient times such a circumstance would

have been accounted for by telling us that the sympathy was such as to cause the death of the tree through grief.

The ivy was not a favourite plant with Pliny. * He says it injures plants wherever it adheres, that it breaks sepulchres of stone, and undermines city walls; but with all our attachment to this great naturalist, we shall recommend it to the shrubbery, with the caution, however, of not planting it so as to overrun the walls of the dwelling, where it will cause damp, and create litter by the numerous insects that will seek its shelter. We would rather that the shrubbery should appear green from the dwelling, than that the house should be seen clothed in that colour from the walks. There are certain styles of building which admit it better than others; but we prefer even the Norman tower and the Gothic arch when unadorned with this climber, which breaks the harmony of the parts, and gives it too much the appearance of a clipped hedge, which is particularly conspicuous in the south front of Arundel Castle, which stands on a bold eminence surrounded by noble trees, and therefore is injured in its boldness by the ivy that has been added with so much care.

Ruined towers, broken archways, and un-

inhabited monasteries, are the works of man, with which it should be blended. It is also an admirable cover for walls and other fences which surround the shrubbery; and it may be properly used to ornament the lodges where the mansion is either in the castle or Gothic style.

We have often seen it give a picturesque appearance to cottages; but we also prefer to see a white cottage through the branches of green trees, than to look on a green-clad cottage in a naked plain. Plantations within view of the mansion, or the walks that surround it, are generally laid out more for effect than with an idea of the profit to be derived from the timber; and in such situations, particularly where evergreens do not abound, the ivy may be cultivated so as to add considerably to the beauty of the prospect, and even within the boundaries of the shrubbery, where other evergreens have been destroyed by the drip or shade of lofty trees, which should always form a back-ground, the ivy may be suffered both to cover the surface and climb the trunks to great advantage. When trained to a stake, and suffered to form a head, it becomes one of the most ornamental of all the evergreens; for the singular complication of its pliable branches, and

the vivid green of its foliage, together with its black clusters of berries, form a mass of beauty that is exceeded by few exotic plants. There is a singular character to be observed in the natural history of the ivy : it never produces flowers whilst trailing on the ground, but when it can climb to display its simple umbels, it flowers amply, and produces fruit abundantly ; and so long as it can find support upwards, its stalks remain slender and flexible, but when it has reached to the top of its support, they shorten and become woody, and the top becomes bushy like a tree. Its leaves also take a different shape. They are no longer lobed as at first, but assume a more oval shape, and expand to a larger size : thus the plant seems to prune its branches when it would be no longer safe to ramble, and to spend its superfluous sap in enlarging its leaves.

Its principal time of flowering is in October ; and the bees and flies seem to know that it is one of the last offerings that Flora will make them, by the eagerness with which they buzz around it.

The berries are not perfect before February, nor ripe before April ; but between these months, the wood-pigeon, the thrush, and the blackbird feast on the fruit continually.

The ivy is found wild in most parts of Europe ; but Linnæus observes, that it is by no means common in Sweden ; Kalm remarks, that he never saw the common ivy in North America, excepting in one instance, against a stone building, which was most probably brought from Europe, and planted there. According to Thunberg, it is found in Japan ; but he observes, that its leaves are never lobed there as with us.

Our nurserymen furnish us with a variety with white or silver striped leaves, and another with yellowish leaves, both of which may be ornamentally employed.

Modern practice has abandoned the use of this plant in medicine, but it is not long since the leaves were in use, to put over issues to keep them cool and free from inflammation. Pliny enumerates the various disorders for which it was anciently used ; but he remarks, that in physic, the ivy is both doubtful and dangerous. A decoction of ivy leaves was formerly used to dye the hair of the head black, which was a colour the ancients seemed as anxious to possess as our modern grandmamas are to retain flaxen locks.

The roots of the ivy are used by leather-cutters to whet their knives upon.

SYLVA FLORIFERA.

LABURNUM.—LABURNUM: CYTISUS.

Natural order, Papilionaceæ, or Leguminosæ.

A genus of the Diadelphia Decandria Class.

Laburnum, rich
In streaming gold."

" Nor might she fear in beauty to excel,
From whose fair head such golden tresses fell

THIS beautiful alpine tree was known to the Greeks under the name of *Ἀνάγυρος*, and its emetic qualities gave rise to their proverb, *Anagrin commovere*, "to work one's own woe." It is observed that the bees avoid the flowers of this tree, whose leaves are so agreeable to the goat. Theocritus, the poet, who flourished

at Syracuse, in Sicily, about 282 years before the Christian era, remarks, that the wolf pursues the goat with as much eagerness as the goat hunts for the laburnum; and Virgil has celebrated it for augmenting the milk of goats. Pliny tells us, that the laburnum belongs to the Alps, and that it was not commonly known in Italy when he wrote his Natural History. He says, the wood is white and hard; and that the bees would not even settle upon the blossoms of this tree.*

The laburnum has long graced the British gardens, as we learn from Gerard that it flourished in Holborn in 1596. What would be the astonishment of this excellent old herbarist, could he be recalled, to see each avenue of his garden formed into streets; houses erected on his parsley beds, and chimneys sprung up as thick as his asparagus; churches occupying the site of his arbours, and his tool-house, perhaps, converted into the British Museum, where is safely housed the lasting memorial of his labours. In vain would he now seek wild plants in Mary-le-bone, where each blade of grass is transformed into granite, and every hawthorn hedge changed for piles of bricks: carriages rattling where snails were formerly

crawling.^f His ear would be assailed by the shrill cry of "Milk below," and the deep tone of "Old clothes," where he had formerly retired to listen to the melody of the early lark, or the plaintive tones of the nightingale.

" ——— A breath of unadulterated air,
The glimpse of a green pasture, how they cheer
The citizen, and brace his languid frame ! "

Yet how careful have they been to keep it as distant as possible from the narrow yard of our metropolitan church, which stands on one of the finest sites in the universe; as will be seen when the age arrives that will level the buildings which obstruct the view of it from the Thames. Should the cathedral of Saint Paul's ever be seen forming the centre of a crescent, which would open to the south, and whose base would be washed by the noble but now obscured river, it would become the most splendid spot, and the most delightful promenade that the world could boast. What would not the citizens give for so fine and healthy a spot, where themselves and their families might breathe an air, scarce less healthy than that which they must now go many miles to enjoy? What wealthy citizen is there who would not contribute largely to see the finest church on the earth stand at the

head of a lawn, which gradually ascends from the waves of his boasted river ; and what situation could be so eligible for the erection of national galleries, libraries, and museums, as this would offer : — but let us return to the shrubbery ; for

“ The statesman, lawyer, merchant, man of trade,
Pants for the refuge of a peaceful shade.”

The laburnum was called Bean-trefoile tree in the time of Gerard, because the seeds are shaped like the bean, and the leaves like the trefoil. It had also the name of Peascod tree in that age, but which has long given way to that of the Latin *Laburnum*, which Haller says is evidently derived from the Alpine name, *L'aubours*. In French it is named *Cytise des Alpes*, *Abours*, and *Faux ébénier*, because the wood was often used as a substitute for ebony.

The laburnum is a tree of the third height, and flowers in the shrubbery from eight or ten to twenty feet in height. As it is of the middle stature, so should it generally form a central situation. Dark evergreens, of the larger kind, form a good back ground to this cheerful, flowering, and graceful tree, whose yellow pendent blossoms shine more conspicuously by the contrast. Its extending branches should wave their golden treasures

over the snowy balls of the guelder rose, or the delicate tints of the Persian lilac; whilst the tall eastern lilac may dispute the prize of beauty with its gay neighbour from the Alps, and our native hawthorn's silvery petals shine not in vain; for

“ Thus is Nature's vesture wrought
 To instruct our wand'ring thought;
 Thus she dresses green and gay,
 To disperse our cares away.”

We have introduced no tree that is more ornamental to our plantations than the laburnum; it relieves alike the gloomy clumps of mountain firs, and the borders of the forest shades; it enlivens the holly hedgerow, and embellishes the cottage garden. It would also become a profitable timber, were we to plant it for that purpose; for the wood is of a hard nature, and approaches near to green ebony. Mr. Boutcher tells us, that he saw a large table, and a dozen of chairs made of this wood, which were considered by judges of elegant furniture to be the finest they had ever seen. Its use for these purposes is common in France, but it has seldom been suffered to stand long enough in this country to arrive at any size. Mr. Martyn says, he has seen trees of the laburnum, in old Scotch gardens, that were fit to cut down for the use of

the timber, being more than a yard in girth, at six feet from the ground; and these had been broken and abused, otherwise might have been much larger. This able writer tells us, in his edition of Miller's Gardener's Dictionary, that the laburnum grows very fast, and is extremely hardy, and is well worth propagating upon poor, shallow soils, and in exposed situations.

His Grace the late Duke of Queensberry sowed a great quantity of the seeds of this tree upon the side of the downs, at his seat near Amesbury, in Wiltshire, where the situation was very much exposed, and the soil so shallow, that few trees would grow there; yet in this place the young trees were twelve feet high in four years' growth, and became a shelter to the other plantations, for which purpose they were designed. In neighbourhoods where hares or rabbits abound, these trees will require protection, as they will otherwise bark them in the winter; and hence it has been suggested, to plant laburnum seeds in plantations infested with these destructive animals, which will touch no other plant so long as a twig of laburnum remains. Though eaten to the ground in winter, it will spring again the next season; and thus constantly supply food for this kind of game. A small

LABURNUM.

sum laid out by a farmer in this seed, and judiciously sown in his hedges or coppices, would save his crops, as well as the planter's young trees.

Laburnums are recommended to be planted thick, for the purpose of drawing them up, to form hop poles, which are said to be more durable than those of most other wood. Matthiæus speaks of its being used for making the best bows. It is found to char remarkably well; and the wood is esteemed also for making pegs, wedges, musical instruments, and a variety of purposes for which hard wood is required.

The laburnum is easily propagated by seed, which it produces in great plenty. It is usually sown in the month of March; but young trees may generally be found in abundance where the trees have scattered their fruit. In forming plantations for poles or timber, the seeds should be sown where they are intended to remain; but for the shrubbery, or ornamental plantation, they should be removed, and their roots shortened, which will cause them to flower more abundantly.

Children should be cautioned not to eat the seeds in the green state, which are violently emetic and dangerous.

LARCH. — PINUS LARIX.

*Natural order, Coniferæ. A genus of the
Monœcia Monadelphica class.*

“ The swain, in barren deserts, with surprise
Sees *larch trees* spring, and sudden verdure rise.”

THE face of our country has, within the last thirty years, been completely changed by the numerous plantations of larch that have sprung up on every barren spot of these kingdoms, from the southern shores to the extremity of the north, and from the Land's End to the mouth of the Thames. So great has been the demand for young trees of this species of pine, that one nurseryman in Edinburgh raised above five millions of these trees in the year 1796. We have introduced no exotic tree that has so greatly embellished the country in general. Its pale and delicate green, so cheerfully enlivening the dark hue of the fir and pine, and its elegant spiral shape, contrasting with the broad spreading oak, is a no less happy contrast; whilst its stars of fasciculate foliage are displayed to

additional advantage, when neighbouring with the broad-leaved æsculus, the glossy holly, the drooping birch, or the tremulous asp.

The larch seems created for society, as it shines with additional lustre amidſt trees of every cast and character.

“ Like some encharſtreſs, with her magic wand,
In treasures new ſhe decks the ſmiling land.”

The thanks of the preſent age, and the gratitude of the next, are and will be given moſt ſincerely to thoſe noblemen and gentlemen who have ſo greatly contributed to the beauty of our rural ſcenes, and the profit of themſelves and their heirs. Theſe plantations diſplay a moſt noble love of country, and generous provision for poſterity; and that theſe liberal minded planters may long live to enjoy the beauties they have created, and reap the harveſt they have ſown, muſt be the fervent wiſh of every good Briton.

“ Perhaps ſome ſire, in life’s declining year,
Thoſe woods revisits, to his memory dear;
In infant days that planted by his hand,
Now wave aloft, and decorate the land.
For him the groves a ſmiling aſpect wear,
And fields and flowers his tranſport ſeem to ſhare !”

The larch was conſidered by the ancients as amongſt the moſt valuable timber trees,

particularly for the purpose of building, being almost imperishable, and less inflammable than any other wood; and we read of no tree that exceeded it in height. Amongst the timber which was brought to Rome for the purpose of building the bridge called *Nau-machiaria*, about the 20th year, A. D., was a larch that measured two feet square in thickness throughout, from end to end, and was of the extraordinary length of 120 feet; the tree must therefore have been not less than from 130 to 150 feet in height. Tiberius Cæsar would not allow this wonderful trunk to be used in the erecting of the bridge then building, but commanded it to be placed where all persons might see it as a curiosity; and where it remained for about thirty years, until Nero employed it in building his vast Amphitheatre. Amongst the Romans, the larch was employed, in preference to every other kind of wood, in buildings where strength and durability were required.*

Pliny tells us, that the larch was not found to decay in buildings like other pine timber; and that it burnt more like a stone than wood, never causing flame. This quality of the larch was not unknown to Julis, as he calls it *lignum igni impenetrabile*.

* Pliny, book xvi. chap. 40.

This timber seems to have been scarce in Rome during the Augustine age, as M. Vitruvius Pollio, a celebrated architect of that period, attributes the sudden decay of buildings erected in his time, in a great measure to the want of larch in the neighbourhood of Rome, it having been exhausted before his time; and the expense of bringing it from a distance, in those early days, would have been too great for common purposes.

The larch is a native of the south of Europe and of Siberia; it grows abundantly in Switzerland and in Provence, &c.: and as it must naturally create considerable interest in the generation that is rising with it in these kingdoms, we shall endeavour to point out the very spot on which it first took root, and the circumstance to which the larch owes its birth; and should the veracity of our account be disputed by any critical reviewers, we will call up all our classical and antiquarian friends to defend a point of so much importance, as that of connecting a beautiful idea with a beautiful tree. Behold then, in the graceful larches, the affectionate sisters of the ambitious Phaeton, who were metamorphosed into these trees, whilst sorrowing round the tomb of Apollo's son on the borders of the Po.

“ And beat their naked bosoms, and complain,
 And call aloud for Phaëton, in vain :
 All the long night their mournful watch they keep,
 And all the day stand round the tomb and weep.

Four times revolving the full moon return'd,
 So long the mother and the daughters mourn'd ;
 When now the eldest, Phaëthusa, strove
 To rest her weary limbs, but could not move ;
 Lampetia would have help'd her, but she found
 Herself withheld, and rooted to the ground :
 A third in wild affliction, as she grieves,
 Would rend her hair, but fills her hands with leaves ;
 One sees her thighs transform'd, another views
 Her arms shot out, and branching into boughs.
 And now their legs, and breasts, and bodies stood
 Crusted with bark, and hard'ning into wood.”

As the poplar has been found so abundantly in the neighbourhood of the river Po, it has been conjectured by some that it was that tree into which the daughters of Clymene were transformèd ; but in a medal of *Publius Accoleius Lariscolus*, the three sisters are represented as transformed into larches ; and it would certainly seem that Ovid rather meant the larch than the poplar, from the tears of the sorrowing trees, which agrees with the former, but not with the latter.

*Inde fluent lacrymæ : stillataque sole rigescunt
 De ramis electa novis : quæ lucidus amnis
 Excipit, et nuribus mittit gestanda Latinis.*

“ The new-made trees in tears of amber run,
 Which, harden'd into value by the sun,

Distil for ever on the streams below :
 The limpid streams their radiant treasure show,
 Mix'd in the sand; whence the rich drops convey'd,
 Shine in the dress of the bright Latian maid."

The Greeks call the larch *Λάριξ*, and the Latins after them *Larix*, from whence the Italian and Spanish name *Larice*, and the German *Larchenbaum*, from which we have evidently derived the English name. The French call it *Mélèze*. The larch is known as the only tree whose foliage is deciduous, that produces cones, as all the other species of pines are evergreens. The larch sends out its leaves in the month of April, of a beautiful pale and yellowish green, shaped like the narrow leaf of grass, and in little clusters of about forty each, disposed like the hairs of a painter's brush, but which afterwards expand into rosettes or stars, which drop off in the autumn. The flowers appear also in April, and generally are of a fine crimson colour, which at first gives them an appearance something like small strawberries; but the male flowers extend in length as the pollen ripens. The female flowers are collected into egg-shaped obtuse cones, which when matured are from one to two inches in length, and whose scales protect the seeds in the same manner as the cones of the fir and cedar, &c.

The larch was cultivated in this country as early as 1629, as it is mentioned by Parkinson, in "The Corollary to his Orchard;" but so late as 1656, when the second edition was published, it was but little known; and as the tree is now more generally distributed over the country since his account of it, we shall give his own words, which were dictated for, and dedicated to the Queen of the unfortunate Charles the First, to whom Parkinson was herbalist. This author says, "The larch tree, where it naturally groweth, riseth up to be as tall as the pine or firre tree; but in our land being rare, and nursed up but with a few, and those only lovers of rarities, it groweth both slowly and becommeth not high, the bark hereof is very rugged and thick, the boughs and branches grow one above another in a very comely order, having divers small yellowish knobs or bunches set thereon, at several distances; from whence do yearly shoot forth many small, long, and narrow smooth leaves together, both shorter and smaller, and not so sharp-pointed as either the pine or firre-tree leaves, which do not abide the winter as they do, but fall away every year, as other trees which shed their leaves and gain fresh every spring: the blossoms are very beautiful and delectable, being of an

excellent fine crimson colour, which, standing among the green leaves, allure the eyes of the beholders to regard it with the more desire : it also beareth, in natural places, (but not in our land, that I could hear,) small soft cones or fruit, somewhat like unto cypresse nuts, when they are green, and close.”

It was not likely that this tree should have been cultivated during the commonwealth, which was the age for destroying our forest timber ; but at the Restoration of Charles the Second, Evelyn stood forth as the champion of the British Sylva, and tells the nation, that there had flourished not long since a larch tree near Chelmsford, in Essex, of good stature, “ which,” says he, “ sufficiently reproaches our not cultivating so useful a material for many purposes where lasting and substantial timber is required.”

Mr. Evelyn then tells us that the young larch tree that he had brought up with much care in his garden, was supposed to be dead by his gardener when the leaves fell off, which proves how little the nature of the larch was known in England even at that time.

Mr. Drummond had some larches planted in Scotland as long back as 1734; and two larches were planted on the lawn of the Duke of Atholl's seat at Dunkeld, in Perthshire, in

the year 1741, the largest of which, in 1796, measured, at one foot eight inches from the ground, eleven feet eleven inches in circumference, and at twelve feet from the ground, eight feet two inches, at twenty-four feet the circumference was seven feet seven inches; at which time some of the younger larches measured upwards of one hundred feet in height. These plants were originally sent from London in earthen pots, rather as a curiosity than from any expectation of their excellency; but they may now overlook whole forests of this timber, of which they have been the parent plant.

The larch having been ascertained to be of a hardy nature and quick growth, thriving better on a poor hungry soil than in a rich earth, and the utility of the timber being universally acknowledged, these considerations induced the Society for the Encouragement of Arts, Manufactures, and Commerce, at London, to offer both honorary and pecuniary rewards for the propagation of this tree; and as long back as 1788, three gold medals and a premium of thirty pounds had been bestowed by the Society for planting larches, and giving an account of the wood; and there is every prospect that the encouragement given by that Society will be the means of

enriching these kingdoms in a few years, by saving the large sums which are annually sent out of the country for pine timber. Amongst the earliest planters of larch we notice the Duke of Atholl, who, we are told by Dr. Anderson, planted 200,000 every year; and by an account which we have lately been favoured with, it appears that his Grace planted 1,102,367 in the winter of 1819 and the following spring. They were planted on 556 acres, or 5.18 Scotch acres, at 2,000 per Scotch acre, at the rate of about 30,140 daily, for thirty-six days, being one day's labour for 1,051 men, or thirty men for the thirty-six days. The expence of planting was about five hundred and seventy pounds, or twelve shillings and sixpence per Scotch acre. The present Duke of Atholl has had the satisfaction of seeing a frigate of thirty-six guns built entirely of larch timber of his own planting, which we believe is more than any other individual in the universe can boast of. It was launched from the stocks at Woolwich, about three years back, being named the Atholl. At the same time a frigate, named the Niemer, was built of Riga fir; and as they are both of the same size and form, and are destined to the same station, the government will have a fair trial of the comparative value of these

timbers. Too much praise cannot be bestowed on his Grace in surmounting the obstacles which were continually thrown in his way by contractors and other interested persons, who endeavoured to prevent this important experiment from being made. A brig, of 171 tons, called the Sarah, has also been built at Perth, of larch timber, from the forest of his Grace the Duke of Atholl. The Diana steam-boat, which plies between London and Richmond, is also composed of the same timber; it was built by Evans of Rotherhithe.

The Duke has some beautiful cabinets formed of this wood, in his house in Great George-street, Westminster; and we have lately seen a table made from one of his Grace's larches, which, in point of beauty and closeness of grain, is nearly equal to those formed from the root of the yew-tree. In 1787, and the following year, the Bishop of Llandaff planted 48,500 larches on the high grounds near Ambleside, in Westmoreland. John Sneyd, Esq., of Belmont, in Staffordshire, planted 13,000 larches between the years 1784 and 1786, and 11,000 more in 1795. W. Mellersh, Esq., of Blyth, planted 47,500. Joseph Cowlshaw, of Hodsock Park, Esq., planted 27,400. Richard Slater Milnes, Esq., of Foyston, near Ferrybridge, in Yorkshire,

planted 200,000, about four years old plants. In the same county, Mr. George Wright planted at Gildingwells 11,573. Thomas White, Esq., of West Retford, in Nottinghamshire, planted 13,000 about the year 1789. The late Earl of Fife planted 181,813 in the county of Moray, in Scotland. In 1791, the Rev. T. Dunham Whitaker, at Holme, in Claviger, in the county of Lancaster, planted 64,135; and in the same year Thomas Gaitskell, Esq., of Little Braithwait, in Cumberland, planted 43,200, on fifteen acres of high land. The same spirit for planting the larch has continued down to the present time, and extended to all parts of the country where the land has not been thought more valuable for other purposes. In 1820, the London Society for promoting Arts, &c., presented the gold medal to his Grace the Duke of Devonshire, for planting 1,981,065 forest trees, 980,128 of which were larch.

The larch-tree is now found to ripen its seed perfectly in England. The cones should be gathered about the end of November, and kept in a dry place till the spring; when, if spread on a cloth, and exposed to the sun, or laid before the fire, the scales will open and emit their seeds. These seeds should be sown on a border exposed to the east, where

the morning sun only comes on it, as the plants do not prosper so well where the sun lies much on them. The young plants may be pricked out into other beds in the autumn as soon as their leaves have fallen off, and the distance of six inches each way is the space recommended between them. In two years they will be ready to plant where they are intended to stand.

When the young trees are planted out for good, they need not be more than eight or ten feet distant from each other; but they must be planted closer on exposed situations: and it is recommended not to dig the ground between young larches; therefore the weeds should be drawn by the hand, or cut down by the hoe, whilst the plantation is young.

Plants which are intended for exposed situations should not be taken from warm sheltered beds, which naturally cause them to be more tender. It has been proved that those larches planted in the worst soil, and in bleak places, have thriven the best; for where trees of equal size have been planted in good earth at the same time, the others on cold stiff land have in twelve years been twice the height of those planted in good ground. The Bishop of Llandaff informs us, that from many experiments made by himself, and col-

lected from others, he finds the annual increase in circumference of the larch, at six feet from the ground, to be one inch and a half, on an average of several years; and that this inference has been drawn from the actual admeasurement of larches in different parts of England and Scotland, and of different ages, from ten years old to fifty. Mr. Hart says, the larch grows slowly the first four years; but in twenty years it will exceed the fir-tree, both in height and circumference, that is double its age. Eight trees being measured in the spring and autumn of the year 1794, the average of their increase in height was nearly three feet nine inches and a quarter; and one of them increased three inches in circumference at two feet above the ground. In another plantation, the trees at eight years' growth measured above twenty feet in height on an average: the trees were from six to nine inches high when planted. At twelve years old they measured, on an average, from thirty-four to thirty-six feet in height; and this increase is continued until the timber is nearly ready to be felled.

In the Memoirs of the Royal Society of Agriculture at Paris for 1787, there is an account of some birch-trees in some parts of

Dauphiné, and in the forest of Baye, in Provence, which two men could not grasp.

Of the qualities of the larch wood we have so much to add to what we have already stated, that should any one read our account who has plantations of this timber, and is not yet acquainted with its valuable properties, he will naturally seem to increase in riches as he proceeds from line to line.

Dr. Anderson says it is possessed of so many valuable qualities, that to enumerate the whole would appear extravagant hyperbole.

We have already noticed what the ancients have said of this timber's resisting the flames; in addition to which Mr. Hart observes, that there is perhaps no instance of the cottages in Carniola being set on fire, although their roofs are covered with boards of this wood, and they are so careless as to throw flaming firebrands on them. Matthiolus notices the incombustibility of this wood; but says, unwilling as it is to take fire, yet it is nowise difficult to burn it in kilns, glass-houses, and furnaces belonging to iron-works, when once the inside of these receptacles is rendered intensely hot. Such is the practice in the iron-works of Stiria and the bishopric of

Trent, where this wood is of singular use, when there is heat sufficiently fierce and strong to penetrate it forcibly.

It is known that the larch timber will resist water in a still stronger degree than it is able to endure the fire, as when employed under water, it remains almost to eternity without rotting. The piles of this timber on which the houses of Venice were built many hundred years ago, are still found as fresh as when first put in. Stakes of it have been tried in the decoys of Lincolnshire, which, between wind and water, have already worn out two or three sets of oak stakes, and do not yet discover any symptoms of decay.

Dr. Pallas, in his survey of the Russian dominions in Asia, observed several tumuli in Kamtschatka, reared at a period so remote, that none of the present inhabitants had any tradition respecting their origin. The platform was covered by larch wood, over which the mound of earth was raised; and the wood was found to be uncorrupted.

It is said that planks of larch are superior to those of oak for many purposes in ship-building. At Archangel, ships of the line are built of this timber; and at Venice it is also employed in naval architecture, especially in the lighter parts of the upper works,

but not where massy pieces of timber are required, on account of its weight. It resists the intemperature of the air more than any wood known in that country, and therefore is much used for outer gates, poles, &c. In some of the old palaces at Venice there are beams of larch as sound as when placed. Mons. le President de la Tour d'Aigues says, in 1787, "I have in my castle of Tour d'Aigues beams of twenty inches square, which are sound, though upwards of two hundred years old."

We are assured that when used for hop-poles, one set of these would outlast two or three sets of ash; and as it will bear so great a weight, it is particularly adapted for the supporting the roofs in mines, &c.

There is not a branch or twig of the larch, says Dr. Anderson, that may not be put to some useful purpose. The larger branches may be employed in fencing, and the smaller brush for filling drains, and for fuel. In drains it is more durable than any other wood; and though the timber will not readily burn, yet the brush is found to make a fire almost equal to the billets of many other trees. The Italians use it for picture-frames, because no other wood gives gilding such force, brightness, and, as it were, a sort of

natural lurnish ; and this is said to be the grand secret why their gilding on wood is so much better than ours.

On account of its bitter nature worms will not attack it, and it is not subject to warp like most other panels of wood ; and, being extremely solid, it admits of a fine polish or smooth firmness, and is therefore particularly adapted for artists to paint on, as it throws forth the colouring better than any other wood. It is the wood which the incomparable Raphael chose to bear the strokes of his pencil, and his celebrated picture of the Transfiguration was painted on panels of this timber ; and let us hope that we have British Raphaels growing up with our British larches, who will, by their enchanting art, show us that they can metamorphose this wood into beautiful figures, as easily as Ovid transformed the sisters of Phaeton into these trees.

The artist not only finds his palette and panel in the larch, but this tree also bleeds freely to furnish him with turpentine and varnish for his paint, and lends its assistance also in furnishing a material for the frame.

It is the larch which produces the turpentine known by the name of Venetian turpentine, which is obtained by making incisions in the trunk of the tree, at about three feet

from the ground: narrow troughs of about twenty inches long are fixed in the incisions, to convey this liquid into receivers below. The principal season for collecting this resinous juice is from the end of May to September. As our larch-trees become aged, we may fairly calculate on saving much money to the country by using turpentine extracted from our own woods. It is only after the tree has attained the thickness of ten or twelve inches in diameter, that it is thought worth while to collect the turpentine; and from that time, during 40 or 50 years, if it continue in vigorous growth, the tree will continue to yield annually from seven to eight pounds of turpentine.

Martyn calculates that an English acre will contain 682 trees, at the distance of eight feet from each other. Suppose the annual produce to be six pounds a tree, on an average, and the price to be no more than two-pence the pound, the value of the produce would be *3l. 4s. 2d.* the acre.

It was from old larch-trees that the ancients gathered the agarick, so celebrated by their medical writers; but this fungous substance is now fallen into total disuse as a medicine in this country, though it is still used in northern countries as an emetic in intermitting fevers.

The Tunguses use it to dye the hair of the rein-deer; and the women, in some parts of Siberia, wash themselves, and even their linen with it, as it is found to be of a saponaceous quality.

It is now calculated that the Highlands of Scotland will in the next age be able to furnish the whole commerce of the island with timber for its shipping; and it is still to be regretted that so much barren land should be suffered to remain unplanted with this and other timber as we find in the counties of Kent, Sussex, and Hampshire; all of which being connected with some dock-yard, ought not to lie useless to the community when the soil could be so advantageously employed.

Plantations that are formed exclusively of larch destroy the heath and all other vegetation; but, after a few years, a fine grass springs up, that is so valuable for grazing, that it has been let from ten shillings to five pounds per acre for this purpose, which, previous to its being planted, would not bring as many pence. Sir John Hay, Bart., and the Duke of Atholl, have had extraordinary instances of this advantage; but it is observed, that when Scotch firs, or other trees, are mixed in the plantations, this benefit is not derived.

COMMON LAUREL.—PRUNUS LAUROCERASUS.

Natural order, Pomacæ; Rosacæ, Juss. A genus of the Icosandria Monogynia class.

“ In various hues ; but chiefly thee, gay green !
 Thou smiling nature’s universal robe !
 United light and shade ; where the sight dwells
 With growing strength, and ever new delight.”
 THOMSON’S *Spring*.

THE eastern evergreen, which exhibits its large glossy leaves in all our shrubberies, and contributes so considerably to the vernal appearance of our winter walks, seems to have escaped the notice of the ancient Greek and Roman naturalists, although it is a native of the same latitude and longitude from whence Lucullus procured the cherry-tree, which was thought worthy to be placed in the most conspicuous situation amongst the Armenian treasures which he exhibited in his triumphal entry into Rome.

The common laurel came into Europe with the name of *Trebezou curmasi*, which means the plum or date of Trebisond ; and as its

leaf something resembled the ancient *laurus* or bay, it was supposed to be a species of that plant; and as the fruit bears resemblance to our small black cherry, it was called the Bay cherry, and *Laurocerasus*, Laurel cherry.

As it now seldom has any name added to that of laurel, many persons mistake this shrub for the laurel so celebrated of old for crowning both the victor and the poet; and this error is more frequent, from our having changed the name of the *laurus* into bay.

The common laurel was first made known to this part of the world by His Excellency David Ungnad, who, whilst ambassador from the Emperor of Germany at Constantinople, sent, in the year 1576, a collection of rare shrubs and trees to Clusius, the celebrated botanist, at Vienna; but owing to the severity of the weather whilst on their journey, and the carelessness of those who brought them, they all perished, excepting the horse-chestnut and the laurel, and Clusius relates that the latter was almost dead when it arrived. He put it into a stove in the same state as it arrived, and in the same tub of earth. The following spring he took it out, cut off the dead and withered branches, and set it in a shady place. In the autumn it began to shoot from the root; and he then

removed the living part into another tub, and attended it with great care. As it advanced he laid down the branches which took root, and he distributed the plants amongst his friends and men of eminence. Thus the laurel became known throughout Europe. Clusius's plant died without flowering; but another which he gave to Aicholtz flowered in May 1583; and also another a few years afterwards with Joachim Camerarius at Nuremberg. *

The laurel is not mentioned by Gerard in 1597, and we may therefore conclude that it was not then known in England. Parkinson says, in his "Garden of Pleasant Flowers," which was published in 1629, that it grew in the garden of Master James Cole at Highgate, where it had blossomed and ripened fruit, and that it was preserved by throwing a blanket over it every winter. Cole was a merchant in London, who appears to have bestowed much pains and expense in collecting rare plants. Gerard calls him his "loving friend," on which account we conclude he had not received the laurel when he published his Herbal; yet we find that Cole, as well as Gerard, was in friendly correspondence with

Clusius, and we cannot well account for the length of intervening time before they received plants of the laurel. Clusius died in April 1609; and, as Parkinson says, in 1629, Cole's laurel had then "flowered divers times, and borne ripe fruit also," he must have received it early in the seventeenth century.

Parkinson tells us, that he had procured the laurel from Master Cole, and that he had also received its seed from Italy, under the title of *Laurus regia*, the "King's bay;" but it having no affinity with the bay, Bellonius named it *Laurocerasus*, "and I should," says Parkinson, "have placed it in my orchard amongst the sorts of cherries; but the beautifulnesse of the plant caused me rather to insert it here, in the Garden of Pleasant Flowers."

Evelyn says, that he was told by a noble personage, that the laurel was first brought to England by the Countess of Arundel, wife to Thomas Earl of Arundel and Surry, to whom this country is indebted for the Arundelian Marbles.

In referring to the history of this ancient family, we find that the Countess of Arundel set out for Italy in 1614, for the purpose of accompanying her two sons to England. It is, therefore, probable that this evergreen

might have been introduced by her at that time, as it is noticed that wherever she passed she was treated with honours that had never been before paid to an English subject.

The laurel was become common in this country in 1664, as Evelyn observes, that "from the use we commonly put the *lauro-cerasus*, the cherry bay, to, it seems as if it had been only destined for hedges, and to cover bare walls." Ray, in 1688, relates, that it was then very common in English gardens and plantations; that it flowered and fruited very well; was very patient of cold, and braved our winters even in an exposed situation.

This evergreen grows naturally on the eastern borders of the Black Sea, particularly in the vicinity of Trebisonde, as also on the Caucasian mountains, which extend from the Black to the Caspian Sea. It grows also on some mountains in Persia, and in Crimea. It seems to love a moist soil, and to thrive in our atmosphere much better than in most parts of the Continent. At the present time it is even rare in the gardens around Paris; and a very small plant of it at the tomb of Delille is all we observed at Père la Chaise. It is the *Cerasus lauro-cerasus* of M. Jussieu, the celebrated botanist; but it is commonly

known in France by the name of *Laurier-omandier*, Almond-laurel, because the leaves give the flavour of bitter almonds : and it is also called *Laurier-au-lait*, Milk-laurel, from its being used to flavour milk. It was formerly much used in this country to give a flavour to puddings and custards, &c. ; but this practice is much less frequent since it has been ascertained to be a deadly poison. We should therefore caution all persons against its use, and particularly cooks ; for in case of accident, they would be tried for the murder of the sufferer as much as if they had used any other poisonous drug. Dr. Darwin says, “ The distilled water from laurel leaves is, perhaps, the most sudden poison we are acquainted with in this country. I have seen about two spoonfuls of it destroy a large pointer dog in less than ten minutes. In a small dose it is said to promote intoxication. On this account there is reason to believe it acts in the same manner as opium and vinous spirit ; but that the dose is not so well ascertained.” As our shrubbery is meant to amuse, we forbear mentioning the dreadful consequences that have ensued from the baneful juice of this leaf ; but we feel it a duty to caution those who may have been in the habit of using it, particularly as custards and pud-

things are generally eaten by children, whose constitutions may suffer through life from the injury done them by this mode of giving a relish to their diet.

The laurel is rather a heavy than a graceful shrub, but the beauty of its green leaves will always ensure it a situation in ornamental plantations. The foliage is of the most agreeable yellow green, being brighter than that of either the orange or lemon; and as the greater number of evergreen plants are of a dark or bluish green, and many of them with a tint of reddish brown, nothing in point of colour can therefore be more desirable than the laurel to relieve the sameness which would otherwise too often predominate in our winter greens. The common laurel has flowers in April and May, and although small; their appearing in clusters has a good effect, particularly when the trees have acquired age, so as to produce their white petals in abundance.

The laurel, when trained as a tree with one stem, has a very superior appearance to the common bush, particularly when it can be carried to a considerable height before it branches out; and to obtain this effect more speedily, it is recommended to graft the laurel on a common cherry stock, or upon

that of the Cornish cherry, which it generally unites better with than the former.

The laurel should not advance too near the foreground in the shrubbery, but the plants should be sufficiently numerous to give a cheerful contrast in the winter months, and it is well adapted to shut out the appearance of disagreeable objects.

It forms the most beautiful foreground to large plantations, when planted by the hand of taste; but we condemn the mode of bordering clumps and groups with it, which give the idea of a frame to the landscape. It should sometimes intermix with, and sometimes advance from the plantation, so as to avoid the idea of a fence; the grouping must also depend on the formation of the ground, and the situations where we wish to give light or shade.

Where holly abounds naturally, or is cultivated, a mixture of laurel gives great relief; and as it is a shrub of such easy propagation, it ought to be found in considerable abundance in all woodland scenes.

At Woburn Abbey, the seat of his Grace the Duke of Bedford, there is a hill covered entirely with laurels, which are grown to a considerable size; and in the plantations of the

Earl of Chichester at Stanmore, near Brighton, we have seen a hedge of laurel about 220 yards in length, where they have grown to the height of thirty feet, and some of the principal trunks measure three feet in circumference, at about two feet and a half from the ground. These trees have been planted about fifty years, and have never been injured by the frost.

The laurel approaches so near in appearance to the orange tree, that when planted in the shrubbery as a screen for defending the citrus tribe, and a few standard laurels interspersed, a very inconsiderable number of these tender trees may be made to give the effect of a plantation of orange trees, at the season when they can be removed from the orangery, of the conservatory.

It will generally be found that the laurels raised from seed produce the finest plants, particularly for standards, as those obtained from cuttings or layers incline more to a horizontal growth, and produce a greater number of lateral branches, but which are also desirable for some situations in the shrubbery. The berries are seldom perfectly ripe before October, when they should be immediately sown in a dry soil, at about two inches deep,

and the bed should be guarded from frost by any light litter, such as pease, haulm, &c. being thrown over it. The young plants will appear in the spring, and may be transplanted in the following autumn.

Cuttings should be planted as soon as the ground has been moistened by the autumnal rains, which generally happens in the month of September. The cuttings must be the same year's shoots, with a small part of the former year's wood at the bottom; a soft loamy soil is recommended, and they should be planted about six inches deep, and the earth should be pressed tight to the plants.

The common laurel is not without advocates for its medicinal properties; but on account of its known poisonous quality, we strongly decry the use of it, excepting by the advice of those whose time has been devoted to the study of medicine; and with them it is well known that the most beneficial effects are often produced by means of plants which would prove the most baneful in the hands of the ignorant. Linnæus informs us, that this plant is commonly and successfully used in Switzerland for pulmonary complaints. Langrish mentions its efficacy in agues.

Baylies found that it possessed a remarkable

power of diluting the blood; and from experience recommended it in all cases of disease supposed to proceed from too dense a state of that fluid, adducing particular instances of its efficacy in rheumatism, asthma, and schirrous affections.

LAURESTINE; OR, LAURUSTINUS. —
VIBURNUM TINUS.

*Natural order, Dumosa; Caprifolia, Juss. A
genus of the Pentandria Trigynia class.*

“ Now, all amid the rigours of the year,
In the wild depth of winter, while without
The ceaseless winds blow ire”

FLORA garnishes the cymes of the laurestine with hardy and modest flowers, which seem to say, “I’ll tarry with you till your friends return, and cheer the scene with my pale pink buds and pure white petals,” with which it ornaments the shrubbery from November’s dreary month to the time that Boreas lends to March his strongest breath. We know not how this pretty winter flower stands in the Oral language of the Turks, but we find it emblematical of those British fair who desert the brighter scenes of society to cheer the sorrowing day of the lone widow, or cause the bereft parent to mourn his lost hope with less anguish. We will welcome

thee, therefore, little laurus, in the shrubbery, even when the queen of flowers displays her blushing and odorous petals to the sun; because we know thou wilt come with all thy charms to make our winter walks more gay: and much it must be regretted, that thy mild charms could not detain the great Napoleon to thy native Elba; then many a widowhood would have been prevented, and the name of Waterloo happily never known to the fatherless child of many a sorrowing mother.

The laurestine grows naturally also in many parts of the south of Europe, Spain, Portugal, and it is likewise found wild in Barbary. Old authors give it the name of Laurustinus, from a supposition that it was a smaller species of the bay, *laurus*; they therefore added the word *Τυρος*, or *Τυνρος*, *tin*, or tiny, small. The Greeks called it *Δάφνη ἄγρία*. Cato names it *Laurus sylvatica*; but Pliny says it was thought not to be a laurel in his time.

We are not able to state the exact time when it was first introduced to this country, but Gerard says, in 1596, that it then grew and prospered very well in his garden at Holborn. He calls it the “Wilde baie tree,” and “*Laurus tinus*.”

The Italians call it *Lauro salvatico*, the

Spaniards and Portuguese *Una de perro*, *Follado*, and *Durillo*, the French *Laurier sauvage*, the Dutch *Laurus boom*, and the Germans, *Lorbeerbaum*.

We have several varieties of this winter-flowering shrub, all of which are desirable in the shrubbery, as the branches are sent out close to the earth, and take off the naked appearance which would be otherwise conspicuous in the winter months. Where it is desirable to form clumps of evergreens, on lawns, this is a desirable plant, as it completely obscures the bare trunks of taller growing plants, and blossoms so abundantly when all other shrubs have done flowering. It mixes well with the common laurel, as its leaves are of so different a tint.

It has been frequently noticed, that those trees which are raised from seed are hardier than others that are propagated by layers; but where it is intended to cover the ground beneath tall trees, we should recommend the plants raised by layers, as they will run on the earth in such situations like the ivy, and take root as they run. We found this shrub propagating itself in this way to a considerable extent in a plantation near Ryde, in the Isle of Wight, and we have often noticed its fondness for the sea air.

The autumn is the best time for laying down the branches, which will be well-rooted, and ready to transplant by the following autumn.

Although the blossoms are the most hardy of any plant we introduce into the shrubbery, yet the laurestine is often injured by the severity of the weather, particularly when it is trained up with a naked stem; for as the sap must naturally rise when the tree is in the active state of forming its flowers and seed, it is naturally more susceptible of the frost, and those shrubs of this kind, which have their principal stem protected by branches and leaves, suffer less; and even when the great severity of the winter has killed the branches, we often find vigorous shoots sent forth from the stem when the old wood has been removed.

The berries of the laurestine are very hot, and inflame the fauces violently; yet we find the starlings frequent this shrub, and devour the berries with as much avidity as the black-bird and thrush do those of the mezereon, which are of a similar nature.

LILAC. — SYRINGA.

*Natural order, Sepiariæ ; Jasminææ, Juss. A
genus of the Diandria Monogynia class.*

“ The lilac, various in array, now white,
Now sanguine, and her beauteous head now set
With purple spikes pyramidal, as if
Studios of ornament, yet unresolved
Which hue she most approved, she chose them all.”

• COWPER.

THE delightful sensation which the lovely tints of this elegant flower, and its fragrance, produce on us in the month of May, has been compared to the first emotions of love, for nature seems to have ordained that mortals should not be permitted to see the one or feel the other with indifference ; for who can behold the flexible and modest, yet dignified clusters of this charming flower, whose colours vary at every movement, and so sweetly descend from the finest violet, down to the silvery white, without regretting the short duration of so divine a gift. .

Perhaps we have no flower that gives, or an imagination strong enough to conceive,

greater harmony than is afforded in the happy gradation of colour from the purple bud to the almost colourless flower of these charming groups, around which the light plays and dissolves itself into a thousand shades, which all blending in the same tint, form that incomparable combination that rivets the attention of the most indifferent observer, and throws the painter into despair. We are told Spaendonck himself dropped his pencil before a bunch of lilac; for Flora seems to have designed the thyrsi of the lilac to please the artist by their delicacy, and to tantalize him by their varying tints.

The harmony of colours is so complete in the lilac, that when we place a bunch of the white flowers on a branch of the purple variety, an offensive harshness is instantly observed; nor will the more delicate green of the first kind assimilate with the purple tyrus of the latter, without displeasing the eye.

In the Floral language of the East, where this flowering shrub is a native, and where spontaneously

“ the lilac hangs to view
Its bursting gems in clusters blue,”

they have made it an emblem of the forsaken, because it is the flower that lovers offer their

mistresses when they quit them ; but in this climate, where the charm of the fair is as powerful as this flower is agreeable, the *swain* is kept in constant fear of *receiving* the lilac.

However ungallant the Persian beaux may be in giving the lilac, they are not deficient in complimenting the fair in their language, as their expression for a fine woman and a beautiful flower is the same. Lilac, or lilag, is a Persian word, which simply signifies a flower, but which Europe has given to the shrub it has taken from the ancient Elamites; and from the flower we have given name to one of our most delicate compound colours.

That a plant of the tropical climes should be so hardy as to stand the severest winters of the greater part of Europe is admirable in the lilac. Its easy propagation, and speedy growth, are no less conspicuous than its beauty, and which have contributed to its rapid distribution throughout not only the temperate but even some of the colder parts of Europe ; for it has naturalized itself in Scotland and in the mountains of Switzerland, and it is now found in the forests of Germany, although it was unknown in this quarter of the globe before the year 1562, when Angerius de Busbeke obtained it from the East, and transported it from Constantinople to Vienna, whence he

had been sent ambassador from the Emperor Ferdinand I. to the Sultan Soliman.

The generic name of this plant, *Syringa*, is derived from the Greek *Συμφε*, a pipe, because when the pith is taken from the wood it formed pipes like those which Pan made of the reeds into which the nymph Syrinx was transformed.

• ——— “ ‘Thou,’ he said,
 ‘Who canst not be the partner of my bed,
 At least shall be the consort of my mind,
 And often, often to my lips be join’d.’
 He form’d the reeds, proportion’d as they are,
 Unequal in their length, and wax’d with care,
 They still retain the name of his ungrateful fair.” }
 OVID.

Hence as *syrinx* and *syringa* meant a pipe, the lilac was called the Pipe-tree when first known in England; and under that name Parkinson writes of it in 1640, and Roy in 1665. Although Gerard says, in 1597, “The later phisitions do name the blew pipe-tree *Lil-lach*, or *Lilac*, and some *Syringa*.” This author tells us, that the lilacs were then growing in his garden in very great plenty, where they flowered in April and May: and he adds, “but as yet they haue not borne any fruite in my garden, though in Italie and Spaine their fruite is ripe in September;” from which we learn it was then common in Europe; but we

have no means of ascertaining by whom and in what year it was introduced into England. However, as it reached Germany in the second year of Queen Elizabeth's reign, it is probable that plants were soon afterwards sent to her gardener; as we find by the survey of the royal gardens of Nonsuch, in Surrey, which were planted in the time of Henry the Eighth, and were one of the favourite residences of Elizabeth, that in the privy-gardens of that palace there were fountains and basins of marble, one of which was "set round with six lilac trees, which bear no fruit, but only a very pleasant smell." This survey was made in the time of Charles the Second, who gave the palace and gardens of Nonsuch to one of his mistresses, who pulled it down and sold the materials.

Gerard considered the lilac to be a species of privet: later writers took it for a kind of jasmine; and M. Jussieu, in his Natural Classification of Plants, also makes it one of the jasmine family.

In the shrubbery the lilac is amongst the first that announce the return of spring; and no flowering tree makes known the welcome tidings in a more pleasing garb, for the beauty of its foliage, and particularly that of the white variety, is scarcely less agreeable than its

girandoles of flowers, that shed their perfume so delightfully over our May-day walks.

The praise which Eudisia bestowed 'on the swan, we may safely borrow for the white lilac, as it is equally an

“ Emblem of modest grace,
Of unaffected dignity and ease,
Of pure and elegant simplicity.”

Many persons complain of the lilac for shedding its flowers so early, without taking into consideration at what an acceptable period the blossoms appear, and that it lends its beauties, with those of the laburnum, to fill up the space between the flowering of the almond and the arrival of the rose, which leaves us nothing to regret.

The most beautiful variety of the common purple lilac is that known by the title of the Scotch lilac, from its having been first mentioned in the catalogue of the Edinburgh garden. The flowers of this kind are of a much richer colour than those of the blue lilac, the buds and under side of the petals being of a hue between purple and carmine, that gives a kind of ripeness to the appearance of the clusters, which are produced in larger groups, and with larger flowers also, than any other lilac. This kind likewise gives out its blossoms about fourteen days later than the

common lilac, which lengthens the season of these flowers very considerably. The Scotch lilac is succeeded by the Persian lilac, which continues in blossom until the end of June, thus decorating our plantations from eight to ten weeks with the most agreeable attire.

During the last year we enjoyed the forced lilacs from the beginning of February until those of the open garden appeared, which pleasure was lengthened by our meeting with them in full perfection at Paris in the months of August and September, where

*L. lilas qui pend, avec grace,
Offre ses bouquets ingénus,*

at a season we have not yet met with them in this country, although we have equal means with the French of retarding the time of their flowering.

The art of retarding the ripening of fruits, and the flowering of plants, is scarcely less desirable than that of forcing them. We have, therefore, dwelt on it at considerable length in the third edition of the *Pomarium Britannicum*, for by this means we join, as it were, the two ends of the year.

The common lilac grows to the height of eighteen or twenty feet, when planted in a rich light soil; therefore it should hold a

middle rank in the plantation. And we have already noticed how charmingly it contrasts with the laburnum and the Guelder rose; the purple variety being placed with the snow ball, and the white lilac advancing its pale leaves before the cypress, the bay tree, or other dark evergreens; whilst the blue Persian lilac may spread its more humble, but not less graceful branches, in the foreground of its white relative. The Persian lilac seldom exceeds five or six feet in height in the most favourable situations; therefore it should only be placed in front of the shrubby clumps or plantations. It often spreads to a considerable extent, and covers its whole mass with its loose branches of delicate flowers, which are of a more agreeable, though less powerful odour, than those of the common lilac. We have seen large bushes of the common privet-leaved lilac growing on lawns, bending their slender branches to the turf every way, and forming a mount of blossoms, arising from the green sward, that could leave the most voluptuous florist nothing to wish. Of the Persian lilacs, the variety with cut or pinnatifid leaves was the first introduced, which Parkinson tells us, in 1640, was then growing in the garden of Master Tradescant, at South Lambeth. It is noticed also by Parkinson, in his

“Garden of Pleasant Flowers,” of 1629, but he there states that it was a stranger to England, and that he described it from foreign accounts, with a hope that some one might be induced to bring it to this country. It is therefore clear that its first introduction was between these two dates. It was formerly called the Persian jasmine by our nurserymen, although it was first introduced into Europe with the Persian name of *Agénæ*. It is generally supposed that the white Persian lilac is only an accidental variety, either raised from seed, or produced from suckers of the blue sort.

The Chinese lilac was first brought to this country in 1795. It is of a middle stature, between the Persian and the common lilac, and its leaves smaller than the common kind, with branches that are generally better furnished with blossoms, and that are both larger and deeper coloured than those of the Persian lilac.

The lilac should never have its branches shortened, as the flowers are always produced at the ends of the shoots of the former year, and just below the girandole of flowers other shoots come out to succeed them, and contribute much to the beauty of the flower. The part on which the flower stands, decays down

to the young shoots every winter. Thus nature prunes the lilac, but the trees of the common lilac are greatly improved, by attention in keeping the stem free from suckers, as it will always be observed, that those plants which are so trained, produce the finest and most abundant flowers, and on this account, the plants that are raised from seeds are much to be preferred, as they are not so apt to abound in suckers. If the seeds be sown as soon as ripe, they come up the following spring, and generally flower the third or fourth year from seed, which is earlier than those that are taken from suckers. As the Persian lilac seldom ripens its seed with us, it is usually propagated by suckers, but it is more desirable to multiply the tree by laying down the young branches, which in one year will be sufficiently rooted to transplant.

We cannot close our account of the lilac without observing that it is amongst those trees that retain their verdure the longest; and as it cannot be too familiar with us, it is to be hoped that we shall see it creep into our hedge rows, and sometimes border our woodland scenes.

LIME, OR LINDEN TREE.—TILIA.

Natural order, Columniferae. Tiliaceæ, Juss.
A genus of the Polyandria Monogynia class.

— “ And the lime at dewy eve
 Diffusing odours.” COWPER.

FASHION reigns over the toilet not with more arbitrary power than she governs the plantation. She even enters the forest, declaring war against and levelling to the earth all such as are not in favour with her court ; and as Caprice generally holds the situation of prime minister to this tyrannical goddess, it is not surprising that Folly should so often be employed as first marshal. Reason, who is deemed a traitor by this government, finds his opposition too weak to oppose such a phalanx, and sees the lofty tree and the lowly shrub alike rooted from our native woods, their antiquity and utility no more availing themselves, than their beauty, or singularity influences the whimsical disposition of Fashion, who is thought to be a spurious daughter of Taste. In vain did the lime fill

the sighing breezes with delightful odours,—in vain were its agreeable shade and pretty umbels offered as a ransom to appease Fashion, offended by the litter of its early falling foliage; her influence was too great, and the lime bowed its noble head to the axe of Folly, leaving its thinly scattered offspring to the protection of Obscurity, until Reason return to resume his administration. Monsieur Louis Liger remarks, in 1703, that the lime, or linden-tree, was then gone out of fashion in the French plantations, being supplanted in favour by the hornbeam and the elm. But our celebrated nurserymen, London and Wise, tell us, in 1706, that it was then more in use in England than any other tree “for standards and espaliers, having found the inconvenience of planting elms near the fruit trees, or good plants; because the roots of the elm impoverish all the ground where they grow.”

This tree is the Φίλυρα (*philyra*) of the Greek writers, and the *Tilia* of the Latin authors. It is thought that the Greeks named it *Philyra*, because the inner bark formed thin sheets on which they anciently wrote, instead of parchment or paper. The Latin name is supposed to be derived from τίλον, which signifies a feather, because the flowers of this tree are produced from a kind of tongue,

called the bractes, which very much resembles a feather. The Italians follow the Latin name *Tilia*, from which also the Spanish *Teia*, and the French *Tilleul*, seem derived.

The English title seems to be a corruption of the Dutch *Linde* or *Lindenboom*, or the German *Linden* or *Lindendbaum*, as all our early writers call it Line, or Linden-tree; and as we have now one species of the citrus-tree called Lime, it would be desirable to resume the ancient name of this tree, and call it Linden, to avoid confusing the two.

The linden is a native of Europe, and, according to Thunberg, of Japan also. Mr. Aiton makes it a native of this country; but it is hardly to be supposed that the able compiler of the Hortus Kewensis could possibly follow back the register of each individual plant with the scrutiny of a poursuivant at arms.

We find no English name for this tree but what is evidently borrowed from the Germans, and our earliest writers mention it as a rare tree. Dr. Turner tells us, in 1568, "it groweth very plenteously in Essekes, in a parke within two mile from Colichester, in the possession of one Master Bogges; it is also very common in high Germany." Gerard observes, in 1597, "that the female lin-

den-tree groweth in some woods in Northamptonshire; also neere Colchester, and in many places along the highway leading from London to Henningham in the county of Essex. The male linden-tree groweth in my Lord Treasurer's garden in the Strand, and in sundry other places, as at Barnelmes, and in a garden at Sainte Katharine's, neere London."

Parkinson says, in 1640, "the female linden-tree is planted in many places in our land, chiefly for the large sweet shadow it maketh; the others are very great strangers in this land, scarce to be seen any where."

Fvelyn complains, and says, "it is a shameful negligence that we are not better provided of nurseries of a tree so choice and universally acceptable." He tells us, that "the young trees were then sent for from Flanders and Holland, to our great cost, although they were to be found in some of our woods."

Excepting the torrid zone there is no part of the globe whose timber-trees do not thrive in this country, as well as in their native soil. The famous linden-tree of the duchy of Wirtemberg, which gave to the city of Neustadt the name of *Neustadt-Under grossen Linden* (the City of the great Linden), although it was of

prodigious height and nine feet in diameter, is not to be compared to one in this country, which grew at Depenam, in Norfolk, ten miles from Norwich, which measured near the ground forty-eight feet in circumference, or sixteen feet diameter; and at some distance higher it girthed thirty-six feet, and in the least part of the trunk it measured twenty-five and a half feet, and was to the uppermost branch, ninety feet in height. (The measurement of this tree was sent to Evelyn by Sir Thomas Brown of Norwich.)

Switzerland is celebrated by Evelyn for its enormous linden-trees, many of which remain sacred to this day. He particularises the famous linden at Zurich; as also one at Schaulouse, under which was a bower composed of its branches, capable of containing 300 persons sitting at ease, and so thick was the foliage that the sun never penetrated.

There is a prodigious linden now standing in the village of Prelly, in the canton of Vaud in Switzerland, under whose shade the rural entertainments of these amiable and interesting people are held. Each village of this canton is governed by twelve men, who are chosen to maintain the observance of the laws; and it was beneath the extending branches of this celebrated tree that the mu-

municipality of Preilly formerly held their common council, seating themselves on the roots which have elevated themselves above the earth, as it were to form a natural bench for the justice of these simple people. This linden-tree is visited by all who make the tour of Switzerland, and many a traveller exclaims with Langhorne:

“ O let me still with simple nature live,
 My lowly field flowers on her altar lay,
 Enjoy the blessings that she meant to give,
 And calmly waste my inoffensive day !”

We have already noticed that the linden was one of the papyraceous trees of the ancients. Munting affirms he saw a book made of the inner bark of this tree, which had been written about a thousand years; and there is a similar one in the library at Vienna, which contains a work of Cicero, *De Ordinanda Republica, et de inveniendis Orationum exordiis*. It was formerly amongst the varieties of Cardinal Mazarine, and which the Count of St. Amant, then governor of Arras, 1662, procured for the Emperor at the price of eight thousand ducats, which, if silver ducats, would amount to 1800*l.*, and if gold, 3800*l.*

Pliny tells us, that in ancient times fillets or ribands for chaplets were also made of

the inner bark of the linden, and which it was esteemed a great honour to wear. The Romans also made cords and ropes from the thready substance which is found between the wood and the inner bark of this tree. The Roman cooks sliced the inner bark of the linden to boil with meats that were over salted, as it was found to make them perfectly fresh.

Of the ancient use of the timber of this tree, we learn from Virgil, who says :

“ Of beech the plough-tail, and the bending yoke,
Or softer linden, harden'd in the smoke.”

Geor. i.

It is from the wood of the linden-tree principally, that the incomparable carvings of Gibbons were formed, which for lightness and elegance of design have never been equalled in modern times, and perhaps not surpassed by the chisels of the ancients, as those beautiful festoons of fruits and flowers in His Majesty's castle at Windsor, and those which ornament one of the noble apartments of the Earl of Egremont's mansion at Petyworth, will evince, as well as those which decorate the choir of St. Paul's and other churches, and noble residences both in London and in the country.

Architects make their models of this wood,

and the carvers prefer it on account of its delicate colour; close grain, easy working, and for its not being liable to split. That it is not subject to worms must be satisfactorily proved by the preservation in which we now see the works of Gibbons, that have been exposed since the time of Charles the Second. It is also remarked by Pliny, that the worm never injured this timber. Evelyn tells us, that this wood is preferable to the willow, being stronger yet lighter. We presume that it was from the strong recommendation of this tree in the Sylva, that it came so much into use in the latter time of that author, as about that time it was planted in St. James's Park; and we find it was also frequently planted in country towns, and trimmed up to screen the windows from the sun; for which purpose it was well adapted, both on account of the fragrance of its flowers and its shade, which is not required after the time the linden throws off its leaves; and few trees were found to bear clipping better than this, as it soon heals the wounds that are caused by the knife; and the branches are so tough that they seldom suffer by the wind, and were found to bear so great a weight that platforms were laid on them, and arbours made in the tree one over the other. Dr. Turner

says he had seen one in Germany with a table on it, around which ten men could sit. Parkinson also notices one which he had seen at Cobham in Kent, that formed three arbours over each other, "which was a goodly spectacle."

The leaves of this tree begin to open about the middle of April, and are generally fully expanded by the 20th of that month. The flowers begin to open by the middle of May, but are not in their full beauty before the middle of July. They are in some degree similar to those of hawthorn, but neither so white nor quite so large, and the flower-stalk is attached to a whitish tongue-shaped leaf. Their fragrance is agreeable to most people, and very attractive to the industrious swarm, for

"the bee
Sits on the bloom, extracting liquid sweet
Deliciously."

But it is observed that no animal will eat the fruit or seed of the linden-tree; Columella recommends the leaves as a good fodder for cattle.

A coarse cloth was formerly made of the inner thready bark, but it was more generally used for cordage, because it has the property

of remaining 'in the water without rotting. The Greeks made bottles of the middle bark of the linden, which were lined with pitch to prevent leakage.

It is said that no wood chars better than this for the purpose of gunpowder. It is also turned into bowls and dishes, and little pill-boxes were made of it before those of paper were invented.

The flowers were formerly held in esteem by the apothecaries, being accounted cephalic and nervine, and good for the apoplexy, epilepsy, and palpitation of the heart, &c. They were sometimes added to the spirits of lavender, and they formed the *aqua florum tiliæ* of the last age. The berries, reduced to powder, were used in dysenteries, and the bleeding at the nose. Hoffman speaks in high terms of the infusion of the flowers in water after the manner of tea, by which he says he has known ^{*}an inveterate epilepsy perfectly cured.

Notwithstanding the rules of fashion, we shall always be glad to meet the linden-tree in our summer walks or rides, whether it spring from the hedge-row, the enclosed park, the open street, or form the boundary of the shrubbery, where we hope the sight of ~~it~~ will

remind the young orator of the eloquence of him whose works, we have already noticed, are preserved on its bark. . . .

In humbler situations we would have this tree give the artist emulation to excel the hitherto unsurpassed Gibbons. .

So great was the honour thought of planting a linden-tree on the continent, during the confederacy, that as soon as one party had made themselves masters of a village; they planted a linden in the public place, destroying those which their adversaries had set, and which was again hewed and another planted as often as victory decided in favour of a fresh party.

The finest linden-trees are those that are raised from seed, which should be sown in the autumn, as soon as they are ripe, and covered with mould about three quarters of an inch deep. They are also propagated by layers, which in one year will make a good root: these should be laid down and transplanted about Michaelmas. The linden is also increased by cuttings; but the tree seldom forms so fine a cone-like shape when propagated by either of the latter methods, as when raised from seed.

MAGNOLIA. — MAGNOLIA.

Natural order, Coadunatae. Magnoliæ, Juss.

A genus of the Polyandria Polygynia class.

“ Columbus shew’d
The western world to man.”

IF we except the general deluge and the origin of Christianity, the discovery of America may be considered the most important event that has been recorded since the creation of the world. It has discovered to us an immense territory of land ; a people whose habits and minds were new to us ; it exhibited unknown animals, and afforded us vegetables no less novel than numerous. It has had the effect of a new creation ; new wants have arisen, and new inventions have sprung up to gratify them.

“ Then commerce brought into the public walk
The busy merchant ; the big warehouse built ;
Raised the strong crane ; choak’d up the loaded street
With foreign plenty ; and thy stream, O Thames !
Large, gentle, deep, majestic, king of floods !
Chose for his grand resort.”

THOMSON

The shrubs of the new world have been transplanted into our gardens, and the forest trees of America rear their heads in our woods; whilst, in return, we have planted colonies on the newly-discovered shores, who have reared their national constitution and laws with such care, that it may probably be found thriving there in its purity when time and corruption shall have destroyed the parent trunk.

The magnolia *grandiflora*, or laurel-leaved magnolia, is a native of that part of America which has been named Florida, from the beautiful plants with which it abounds; and when growing in its native soil, the magnolia is esteemed the most beautiful tree known; it reaches from 90 to 100 feet in height, and is clothed with an evergreen leaf of the most lucid colour on the upper surface, and of a russet tint beneath. The shape is nearly that of the common laurel leaf, but much larger; and being agreeably waved on the edge, it has not the heavy and stiff appearance of the laurel leaf, although the consistency is the same. It is sessile, and placed without order on every side of the branches. The flowers appear from June to September, during which time they perfume the air for a considerable distance round with the most agreeable odour, which at one moment reminds us of

the jasmine or lily of the valley, and the next, of the violet mixed with the apricot.

During the last summer we saw a fine tree of this description in the exotic gardens of M. Bourseau, *Rue Mont Blanc*, in Paris, which scented the whole of that elegant plantation.

We have also seen a most noble magnolia in the grounds of the Priory, near Ryde, in the Isle of Wight; and which, we were then told, often wafted its delightful fragrance to more than half a mile in distance. The flowers are produced at the ends of the branches, and are so large as to measure from seven to eight inches in diameter, and are composed of eight or ten petals, narrow at their base, but broad, rounded, and a little waved. They spread open like a tulip, and have the appearance of white kid leather more than of a vegetable substance. In its native country this tree begins to flower in May, and gives out a succession during the whole summer, so that the woods are constantly perfumed with its odour. The pencil can give but a faint idea of the splendour of this beautiful tree, which defies the pen altogether to describe its charms; its leaves are more glossy than those of the laurel, and from nine to ten inches in length, and about three inches in breadth, with a softness on the underside, that gives great variety to the foliage.

The young branches are of a fine purplish brown, and when each spray, for a hundred feet in height, is holding up its petaled vase, as if to offer incense to the sun that nourishes its fruit, a mass of beauty is composed, that rivals the proudest work of man.

The fruit of the magnolia is seated in the flower in a manner similar to the strawberry, which afterwards becomes a strobile or cone, composed of many capsules, each of which, when perfect, contains two scarlet seeds. We are not aware that the fruit has ever matured its seed in this country, though we have seen some old plants that have formed strobiles of considerable size.

This splendid plant received the title of magnolia from Plumier, who so named it in honour of Pierre Magnol, prefect of the botanic garden at Montpellier, and author of several works on plants.

Sir John Colliton is thought to have reared the first plant of this kind in England, at Exmouth, in Devonshire, some time prior to 1737. It was unknown to Mr. Miller, in 1724, when he published the first edition of his Gardener's and Florist's Dictionary; but in a later edition, he mentions that there were a great many plants in England before the year 1739, but the severe winter of that year destroyed most of the young ones. He also

tells us, that he had a pretty large plant which was apparently killed by the severe winter of 1739-40, but that he cut it down after Midsummer, and that it shot up again the year following. We notice this circumstance more particularly, because in case of similar accidents, gardeners may not be too hasty in grubbing up the roots. The magnolia is generally injured most by the early frost, as the extremities of the young shoots are then tender.

His Grace the Duke of Richmond has two of the finest standard magnolia grandiflora trees in this country, at his seat at Goodwood in Sussex, one of which at six inches from the ground, girths three feet one inch, and at four feet from the ground, two feet five inches; at about five feet from the earth it divides into branches, forming a very beautiful head about twenty-three feet in height. The other is thirty-five feet in height, and measures four feet in circumference at fourteen inches from the ground: these trees flower abundantly every year. The time of their having been planted cannot be now correctly ascertained.

The magnolia should occupy a situation sheltered from the north and north-east winds, but fully exposed to the south or south-west sun. It seems to thrive in the sea air, when the situation is not exposed; and the soil congenial to this tree is a deep rich loam, rather dry than moist.

From the great rarity and extreme beauty of this tree, we think it deserving of more care than is generally bestowed on it, so as to secure it from the frost, and which might easily be done by placing blocks of wood in the earth, with mortices in them, into which poles might be fixed, and a frame or wire-work thrown over, to lay mats or other covering on during the inclement nights. Tall evergreens, of the darkest foliage, form the most proper back ground for this tree.

Our nurserymen raise these trees from seeds, which are sown in pots, and plunged into old hotbeds of tanners' bark. They are seldom strong enough to be planted in the open ground under six years; therefore gardeners are justly entitled to a considerable price for a plant that has required so much of their attention in its propagation. The magnolia may also be raised from layers and cuttings; but these seldom make handsome standard trees.

We have now eighteen species of this plant, nine of which are natives of North America, and nine belong to India, China, or Japan; and should we be able to naturalize them so as to endure our winters in the open air, as the common tulip tree has been made to do, they cannot fail of being regarded as one of the greatest ornaments of the shrubbery.

The swamp magnolia, *glauca*, was the spe-

cies of this plant first cultivated in England, as it is mentioned by Ray, in 1688, as being amongst the rare exotic trees and shrubs then growing in the episcopal garden at Fulham, where it was sent by Banister to Bishop Compton. This shrub seldom exceeds sixteen feet in height, in its native soil; it is found in low, moist, or swampy ground in North America, but not more northerly than Pennsylvania. The perfume of this plant resembles that of the lily of the valley, with a mixture of aromatic odour; and its fragrance is so great, that the trees may be discovered at the distance of three quarters of a mile by the scent of the blossoms, particularly towards the close of day, when it is, we are told, beyond description pleasant to travel in the woods at the season of their flowering. The tree is known in America by the name of White Laurel, Swamp Sassafras; but it is more generally called the Beaver-tree, because the root is eaten as the most favourite food of the beaver, and it is therefore employed to catch these animals. The flowers of this species of magnolia are similar to those of the *grandiflora*. They consist of eight petals, but are not more than three or four inches over. The bark of the swamp magnolia, as well as the fruit and the young wood, form one of the American domestic medicines.

MAPLE TREE.—ACER.

Natural order, Trihilatae. Acera, Juss. A genus of the Polygamia Monœcia class.

“ Nor less attractive is the woodland scene,
Diversified with trees of every growth.”

It is in our hedgerows principally that we find the common maple, as it is seldom, if ever, allowed the honour of adding its shade amongst the number of those that compose the British shrubbery ; although, according to Chaucer, it formed the bower of the fair Rosamond de Clifford ; and Virgil celebrates it as the throne of Evander, and its branches as the canopy under which he received and seated Æneas.

“ On sods of turf he sat, the soldiers round ;
A maple throne, rais'd higher from the ground,
Receiv'd the Trojan chief ; and o'er the bed
A lion's shaggy hide, for ornament ; they spread.”

ÆNEIS, 8.

Pliny enumerates ten different kinds of the maple that were known to the Romans in his time, the timber of some of which was in the highest estimation on account of its fine grain and beautiful veins. It was considered

next to the citron wood in value ; and we are told that in some instances, when it was finely spotted, it brought its weight in gold. To such a height did the fondness of the Romans for curious wood carry them at one period of their history, that their tables were more expensive than the jewels of their ladies.

This tree was generally called σφένδαμνος in Greece, although they distinguished different kinds of maple by different appellations, which was also the custom of the Romans ; but it is most commonly named *acer* in Latin, from *acer*, *acris*, on account of the hardness of the wood, or from *acre ingenium*, from its being so much in use by the most ingenious artificers in fine works. Evelyn tells us, that the wood of the maple is far superior to that of beech for all kinds of turnery ware ; and that in his time it was turned into cups and bowls, and worked so thin as to be almost transparent ; and it was also greatly esteemed for its lightness, and sold under the name *aier*. It was likewise in considerable demand for making various musical instruments. The author of the Sylva states, that by shredding up the boughs to a head, he caused the maple to shoot to a wonderful height in a little time ; at present it is seldom suffered to arrive to the size of a

tree, being generally kept as underwood, and this has in all probability arisen from its character of being noxious to the subnascent plants of other kinds, by the clammy dew which it sheds upon them. It is, however, of quick growth, and affords good fuel, and when allowed to grow into timber, it makes excellent gunstocks, screws for cyder presses, and other purposes that require hard wood. In the vale of Gloucester and other places where oak timber is scarce, it is used for making gates and for other purposes of husbandry.

The largest maple tree in England, is in the church-yard of Boldre, in Hampshire, under whose branches the Rev. William Gilpin, author of "Remarks on Forest Scenery," &c. lies buried.

The common maple, *acer campestre*, flowers in the beginning of April, and the leaves appear about fourteen days later. It is raised by seed, but very seldom cultivated at present, though there are thirteen distinct species of maple, besides several varieties. The sugar maple, *acer saccharinum*, is of great importance to the inhabitants of North America, as its saccharine sap affords them sugar, and little if at all inferior to what is obtained from the cane in the West India islands. Our

account of this tree will be found under the article SUGAR, in the history of cultivated vegetables.

The scarlet flowering maple, *acer rubrum*, is cultivated as an ornament for the shrubbery, where it flowers in April. It is a native of North America, and is found abundantly in the swamps of Pennsylvania, where the bark is used to dye a dark blue colour, and also for an ingredient in making ink.

The Canadians tap this tree, from the juice of which they make both sugar and treacle, as well as from the sugar maple. Mr. John Tradescant cultivated the scarlet flowering maple in this country as long back as 1656.

MEZEREON. — MEZEREUM.

A SPECIES OF DAPHNE.

*Natural order, Vepreculæ. Thymelææ, Juss.**A genus of the Octandria Monogynia class.*

“ See Nature hastes her earliest wreath to bring
 With all the incense of the breathing spring.”

POPE.

——— “ Mezereon too,
 Though leafless, well attired, and thick beset
 With blushing wreaths, investing every spray.”

COWPER.

THIS pretty shrub, which decks its branches with garnet-coloured petals so amply as to hide its dead-looking wood, and often so early that its murrey flowers shine above a bed of snow, has been made in floral language to express a desire to please, whilst others make it the emblem of coquetry, comparing it to a nymph, who in the midst of winter seeks admiration in her summer robes.

As our admiration is demanded in the saloon by the well-dressed coquette, so is our notice attracted in the shrubbery by this

early-flowering plant, whose perfume, like the arts of coquetry, is both delightful and dangerous.

The mezereon sometimes blossoms as early as the end of January or beginning of February, and when three or four of them are planted in a group, the effect is very agreeable, as the whole shrub becomes a mass of flowers without confusing the branches, the top of each of which terminates with a tuft of leaves like the crown of a pine apple, but of a beautiful yellow green, which harmonises as agreeably with the garnet set spray, as the grey green contrasts with the golden fruit of the ananas. It is no small recommendation to the mezereon, that it holds its flowers for a considerable length of time, and seldom fades until eclipsed by the arrival of the more delicate petals of the almond, that also blooms on a leafless bough.

The fruit of the mezereon is a berry of a fine red colour, that is exceedingly ornamental in June and July, but whose qualities are of a more deadly poison than the arts of the coquette, whose injuries seldom prove mortal.

The whole of the mezeron is extremely acrid, particularly when fresh, and if retained in the mouth excites great heat and inflam-

mation, particularly of the throat and fauces. The branches should therefore never be suffered to be cut for nosegays, as young people may be injured by putting the sprigs into their mouths. Children should be especially cautioned against gathering the berries. Mr. Bradley tells us that he ate some of this fruit, which were not unpleasant in taste, but that in about an hour after he had swallowed them, he found an extraordinary heat in his throat, which caused a violent burning pain for about twelve hours.

Nature, whose works never cease to excite our admiration, astonishes us by the wonders contained in the buds of this plant, where not only the flowers, but the parts of fructification may be distinctly seen the year before they unfold themselves. How infinitely do these secret labours surpass the most finished performance of the ablest human artist, yet how few regard them in comparison to the number that run after the works of man !

Modern botanical works claim the mezereon as a native of our soil, but we are decidedly of opinion that their claim is founded on error. It does not appear to have been known to our earliest writers on plants, and is not mentioned by Turner, in 1568 ; and Gerard tells us, in his voluminous work of

1597, that “this plant groweth naturally in the moyst and shadowie woods of most of the East countries, especially about Elbing, which we call Meluin, in Polande; from whence I have had great plentie thereof for my garden, where they flower, flourish, and bring their fruit to maturitie.” This author calls it “Spurge Flaxe, or Dwarfie Bay,” which he says “the Dutchmen call Mezereon, and the English, Dutch Mezereon; but we,” he adds, “had rather call it *Chamelæa Germanica*.” Parkinson gives it this latter name with the addition of that of mezereon, in his work on plants, entitled “the Garden of Pleasant Flowers,” which was published in 1629; and in his larger work of 1640, he retains the same name, calling it also Flowering Spurge; and he says “it grows naturally in Germanie;” but that the Spurge laurel grows wild in England. It was never discovered by the indefatigable Ray, or his immediate successors in this country.

Miller was the first author who mentions the mezereon as a native of this country; and which was not until about 240 years after it had been introduced by Gerard. Miller considered it indigeuous to our soil, because it had been found growing near Andover, in Hampshire. It has since been found by Mr.

White, in Selborne-hanger, in the same county ; by Mr. Woodward, at Laxfield in Suffolk ; and it has also been seen in the beech woods of Buckinghamshire. But these late discoveries by no means prove it a native of the soil, as it is well known how anxiously the thrush and blackbird hunt the garden for the berries of this shrub, the seeds of which are thus conveyed into the copse or wood, where when one plant has sprung up, others would soon succeed, as we have always observed numerous young plants springing up beneath this shrub in the plantation.

We now reckon eleven different species of the *daphne*, one of which *daphne laureola*, spurge laurel, is a native of our woods, and although a plant whose flowers make but little show, its fine evergreen leaves recommend it to the planter, and more particularly as it thrives under the shade of trees or taller shrubs, where but few other plants will exist.

There is a variety of the mezereon with white blossoms, and yellow berries, and another with variegated leaves. They are all raised by seed, sown as soon as ripe in August. The bed or border should be exposed to an eastern aspect ; and the plant thrives best in a light sandy earth that is dry, for in

cold wet land it becomes mossy, and neither makes much progress, nor produces many flowers.

The mezereon seldom exceeds from three to four feet in height, and therefore it should be placed in the foreground of taller shrubs, for when set in the middle of the plantation it is sooner obscured by faster and taller growing shrubs.

The Neapolitan mezercon, *Daphne Collina*, is an evergreen that covers the hills and fields on the banks of the Volturnus, in Italy, as the furze does our commons in England, and it is now found to endure the winters of our climate nearly as well as the common mezereon. It was first cultivated in this country in 1752; but as an ornament to the shrubbery we prefer the deciduous kind, as the flowers of the Neapolitan mezereon are partly obscured by the leaves.

This genus of plants is supposed to be the *Δαφνη* of Theophrastus and Dioscorides; but as there is some doubt of this from the brief remarks they have made on the plant under that name, we shall confine ourselves to the discoveries which modern physicians have made of the virtues of the mezereon, the most important of which was found out by Dr. Russel, whilst physician to St. Thomas's

Hospital ; but as it only concerns the sons of Esculapius and the disciples of Venus, we shall refer them to the London Med. Obs. vol. iii. p. 189.

The considerable and long-continued heat and irritation that is produced in the throat, when mezereon is chewed, induced Dr. Withering to give it in a case of difficulty of swallowing. seemingly occasioned by a paralytic affection. The patient was directed to chew a slice of the root as often as she could bear it, and in about a month she recovered her power of swallowing ; she had suffered the above complaint upwards of three years, and was greatly reduced, being totally unable to swallow solids, and liquids but very imperfectly. *

The medical men of France have a practice of applying the bark of this plant to the skin, for the purpose of producing a discharge or issue without blistering ; and it is thus rendered useful in chronic cases of a local nature, answering the purpose of what is termed a perpetual blister, whilst it occasions less pain and inconvenience. The operation is performed, by affixing to the skin a piece of the bark about an inch square, that has been pre-

Woodville.

viously soaked in vinegar; an ivy or plantain leaf is then bound over it, and this is renewed night and morning until a discharge is established, then once a day is sufficient.

Gérard notices the medicinal qualities of this plant, and tells us in his usual quaint manner, that “if a drunkard do eate one graine or berrie of it, he cannot be allured to drinke any drinke at that time, such will be the heate of his mouth and choaking in the throte.”

MOUNTAIN SERVICE. — MOUNTAIN
ASH, OR QUICKEN TREE. — *SORBUS*
AUCUPARIA.

Natural order, Pomaceæ. . Rosaceæ, Juss. A
genus of the Icosandria Trigynia class.

“ Where shrubs and fruits their mingled sweets exhale,
Or flowers, or trees, whose branches proudly bend,
Their different bloom, their different race, extend ;
Through them what interest do your fields present !
Observe their varied colours, form, and bent.”

DELILLE.

THIS elegant tree seems designed by nature as an ornament to our mountainous plantations of fir and pine, whose dark and fixed foliage contrast so decidedly with the light green tint of these long pinnated leaves, which are seen to move with additional grace when placed in the foreground of sombre trees. It is in this natural situation that the large corymbs or umbelliferous clusters of white flowers are so conspicuously beautiful in the month of May, when each branch is terminated by these bouquets of pearly blossoms. But it is in the months of August and

September, that the mountain ash adds so much to the gaiety of picturesque scenery, when the glowing vermilion fruit decorates the boughs so superbly by its pendent pomes, for botanical language will not allow us to say berries, because the seeds of this plant are disposed like that of the apple in a fleshy pulp, and divided into cells.

Ancient poets tell us, that the Amazons formed their spears of this wood, by which they boldly defended themselves against mortals, whilst the Cambro and the North Britains, in later times, depended on the powers of this wood to protect them from supernatural enemies; and there are still some persons, who cling so obstinately to superstition, as to believe that any small piece of this tree carried about them, will prove a sovereign charm against all the effects of enchantment or witchcraft.

In Wales, says Mr. Evelyn, "this tree is reputed so sacred, that, as there is not a church-yard without one of them planted in it, (as amongst us the yew), so on a certain day in the year, every body religiously wears a cross made of the wood, and it is reputed to be a preservative against fascinations and evil spirits, whence perhaps we call it witchen, the boughs being stuck about the house, or

the wood used for walking staves." It seems to have been one of the sacred Druidical trees, as stumps of it were frequently found near the circle of their temples; and Mr. Lightfoot remarks, that this tree may to this day be observed to grow more frequently than any in the neighbourhood of the Druidical circles of stones, so often seen in North Britain.

It is curious to observe for what opposite purposes plants are used in different countries. The mountain-ash, which our northern friends so religiously planted to keep off enchantment and sorceries, is most carefully propagated by our more southern neighbours, as one of the principal charms by which they entice the belles of Paris into the public gardens, where they are at liberty to use all the spells and witcheries which they are mistresses of; and it must be confessed that no tree has a more enchanting appearance when lighted up with lamps than the mountain-ash, by its brilliant scarlet fruit, in the months of August and September.

At Strathspey, in Scotland, it is the practice of the country people to make a hoop with the wood of this tree, through which they oblige all the sheep and lambs to pass both in the morning and evening of the first

of May; and the Scotch dairy-maid will drive her cattle to the *shealings* or summer pastures, with no other rod than that of the roan-tree, by which name it is generally known in Scotland. It obtained the name of mountain-ash, in England, from its growing in hilly situations, and its leaves being pinnated like those of the common ash, *fraxinus*; but it has no more affinity to the ash, than the apple-tree has to the oak.

The trivial name of *aucuparia* was given it from the practice of the fowlers, who use the fruit to bait their springes with, by which they entice the redwings and fieldfares to their snare. The Scottish highlanders, as well as the inhabitants of Kamtschaika, distil an ardent spirit from this fruit; and in Wales the poor people infuse it in water, and make an acid liquor resembling cider, which they drink with pleasure.

In the island of Jura they use the juice of this fruit as an acid for punch.

The wood of this tree is tough and close-grained, but not hard; and it appears to have been much more plentiful in our woods formerly, than at present; as Evelyn says, it is mentioned in a statute of Henry the Eighth, and he observes, that the fletchers commend

it for bows next to yew, and that the wheelwrights praise it for being all heart.

It is a native of cold mountains, and grows naturally on Mount Libanus, and also in Siberia, as well as in Wales, Ireland, Scotland, and the northern parts of England, where it becomes a considerable-sized timber-tree.

This highly ornamental tree is raised from seed, and it will grow upon almost any soil, either strong or light, moist or dry. Its situation in the pleasure ground should be between the tallest flowering shrubs and the forest trees. We have already noticed the colour and time of its flowering as a guide to what neighbour the planter should give it; but it is in the latter part of the summer that it makes the greatest figure, when loaded with its showy bunches of fruit, that have a delightful effect in the shrubbery, when there are but few shrubs in flower, and just before the trees change their summer tints for their autumnal hues.

The fruit of the mountain service is so tempting to the thrush and blackbird, that it is sure to attract these sweet warblers to the grove where it grows.

“Sanguineisque inculta rubent aviaria baccis.” VIRGIL.

MYRTLE. — MYRTUS.

*Natural order, Hesperideæ. Myrti, Juss. A
genus of the Icosandria Monogynia class.*

———— “and the fragrant branch
Of glossy myrtle.” MRS. M. ROBINSON.

“ Now let us range both far and wide,
Thro’ all the garden’s boasted pride,
There rising myrtles form a shade,
There roses blush, and scent the glade.” COTTON.

THIS beautiful plant, which attracts our attention by its irresistible charms, was made the emblem of Love, and dedicated to Beauty, when Venus first sprang from the froth of the sea. Mythological writers tell us, that when this fair goddess first appeared on the bosom of the waves, the Hours preceded her with a scarf of a thousand colours, and a garland of myrtle.

“ Her waving locks immortal odours shed,
And breath’d ambrosial scents around her head,
To the soft Cyprian shores the goddess moves,
To visit Paphos and her blooming groves;
Where to her pow’r a hundred altars rise,
And breathing odours scent the balmy skies.

Conceal'd, she bathes in consecrated bow'rs,
 The Graces unguents shed, ambrosial show'rs,
 Unguents which charm the gods: she, last, assumes
 Her splendid robes; and all the goddess blooms."

POPE's *Homer*, and PITT's *Virgil*.

From the delightful perfume of the myrtle, the delicacy of its blossoms, and the glossy green of its perpetual foliage, it seems destined to ornament the forehead of beauty, and the temple of Venus, who was crowned with myrtle by the loves, after her victory over Juno and Pallas. It was with the branches of this tree that the mother of Cupid revenged herself on the audacious Psyche, who had dared to compare her transitory charms to an immortal beauty. It is also related, that Venus being surprised by a troop of satyrs as she was coming out of the bath, took refuge behind a myrtle-bush, which increased her attachment to this tree.

We learn from mythological fables, that crowns of myrtle were anciently called *Naucratites*, from the following miraculous story which is related of Herostratus, a Naucratian merchant, who was overtaken by a terrible tempest at sea, that threatened to destroy his ship and all the mariners, until they implored the assistance of a little statue of Venus which he had brought into the vessel. Their supplications being attended to by the goddess,

she caused a great number of myrtles to rise in and around the ship, with which the sailors formed crowns; and on their safe arrival at Naucrates, Herostratus presented the statue and the myrtles to the temple that was consecrated to Venus; on which occasion he gave a feast, where he distributed the crowns of myrtle to the guests, whence they were called *Naucratices*.

Pliny tells us that the Romans and the Sabines, when they were reconciled, laid down their arms by a myrtle-tree, where they purified themselves with the fragrant boughs of this sacred tree; and that to make atonement, and to ratify their marriage with the Sabine women, the former people built a temple on the spot, in which was placed an image of the goddess, and which was dedicated to Venus *Cloacina*, from *cluere*, that is, to cleanse. The same author informs us, that myrtles were amongst the first trees that the people planted in the public places of Rome, to presage future events; and that there were two sacred myrtles growing before the temple of Quirinus, one of the oldest edifices in Rome, and erected in honour of Romulus. One of these myrtles was called *Patritia*, the myrtle of the nobility, and the other *Plebeia*, the myrtle of the commonalty; and as either of these trees

flourished or decayed, so the success of these opposite parties was prognosticated. The temple of Quirinus was repaired under the consul Lucius Papirus Cursor, in the year 306 before Christ, when the first sun-dial that had been seen at Rome was set up. .

There was also in Rome an ancient chapel and altar consecrated to *Venus Myrtea*, by which name the goddess was often worshipped.

Pausanias relates, that at Lemnos there was a statue of Venus, formed of myrtle, which Pelops caused to be made to insure his marriage with Hippodamia.

The myrtle-wreath was worn by those generals who obtained victories without bloodshed. Posthumius Tubertus, when consul of Rome, was the first who was honoured with this crown when he entered the capital in ovation, after having conquered the Sabines without shedding blood. These chaplets were dedicated to *Venus Victrix*. Papyrius Masso, who triumphed over the Corsicans, was allowed for ever after to wear this crown when he visited the Circensian games.

The weapons of war were also formed of this tree, as Virgil writes,

“ The war from stubborn myrtle shafts receives ;”
and we learn from the same poet that it formed the arms of Camilla, a Volscian queen.

“ She shakes her myrtle javelin; and behind,
Her Lycian quiver dances in the wind.”

ÆNEID, vii.

The ancients made great use of this plant in medicine, and they formed a kind of wine from the berries, as well as an oil which they extracted from the ripe fruit of the myrtle. The Romans flavoured their wine with the berries, as well as many of their dishes in cookery, before the use of pepper was known to them, and even then it was in high estimation for making sauce for the brawn of the wild boar.

The myrtle is a native of Asia, Africa, and the southern parts of Europe. It grows common in Italy as an underwood; yet Pliny considered it as not being a native of that country, or of any part of Europe. He tells us, that the first myrtle which was seen in Europe was near Circeii, where the tomb of Elpenor, one of Ulysses' companions, stood; and he remarks, that in his time it retained the Greek name, from which he also considered it a stranger. It is indeed the Greek name of this tree, *Myrtos*, which has been followed by all the European languages. In Latin, it was called *Myrtus*; in German, *Myrte*; in Dutch, *Myrtus*; in Danish, *Myrter*; in Swedish, *Myrten*; in French, *Mirte*; in Italian and Spanish, *Mirto*; in Portuguese, *Myrta*, or *Murta*. The Arabians call it *Aes*, *Alas*, and *As*.

Fable informs us, that the Greeks named this tree *Μύρτος*, from *Myrsine*, an Athenian damsel, who, being overcome in wrestling and the race by Pallas, died of envy; but being a favourite of Minerva, she was metamorphosed into a myrtle-tree, which the goddess held next in esteem to her sacred olive: but Pæna says, it was so named from the fragrance of the berries and plant, nearly resembling the celebrated odour of *Myrrha*, myrrh. This beautiful evergreen has been made sacred to Veritas, as well as to Venus and Minerva.

“ Unfading branch of verdant hue,
In modest sweetness drest,
Shake off thy pearly tears of dew,
And decorate my breast.

“ Dear emblem of the feeling mind,
Truth’s consecrated tree!
Still shall thy trembling blossoms find
A faithful friend in me.”

MRS. MARY ROBINSON.

Cato wrote on three kinds of myrtle only, but Pliny mentions eleven varieties that were known in his time, and says that the most odoriferous myrtles grew in Egypt. It has been observed that this tree grows naturally only in hot sandy situations, from which it seems to remove all other plants, as if it would reign alone in the ground it occupied, thus imitating the goddess of which it is symbolical, who, when once she has taken possession

of the heart, leaves no place for other sentiments.

“ The spiry myrtle with unwith’ring leaf
Shines *here* and flourishes.”

COWPER.

It was upon a memorable occasion, that the myrtle was introduced into this country, as it is said to have been brought from Spain by Sir Walter Raleigh and Sir Francis Carew in 1585, when they resided in Spain, and discovered the preparations for the Spanish armada against us.

Sir Walter, we may presume, would lay this emblem of love at the feet of his royal mistress, who seems to have had no objection to such acts of gallantry; whilst Sir Francis, we may conjecture, took no less pleasure in planting Venus’s favourite tree at Beddington in Surrey, where he had about the same time planted the first orange-tree that graced the British soil.

This account of the period when the myrtle was introduced, seems confirmed by the writings of the prior and succeeding authors, for in Dr. Turner’s history of plants, which was published in 1568, no mention whatever is made of the myrtle; but in 1597, Gerard speaks of it as a plant of late introduction, as he remarks that myrtles bear no fruit in England.

Spenser, a poet high in the esteem of Queen Elizabeth and Sir Walter Raleigh, thus notices the myrtle in his "Faerie Queene."

"Beside the same a dainty place there lay,
Planted with mirtle trees and laurells greene,
In which the birds sang many a lovely lay."

Miller tells us in his first edition of the Gardener's and Florist's Dictionary, printed in 1724, that "at Sir Nicholas Carew's, at Beddington, is a myrtle of the Spanish broad-leaved kind, which is above eighteen feet high, and spreads above forty-five feet." If this were the original tree, it would then be 156 years old, and most probably perished with the original orange-trees, that were killed by the severe winters of 1739-40, being then about 160 years old.

Evelyn says in 1678, "I know of a myrtle near eighty years old, which has been continually exposed, unless it be, that in some exceeding sharp seasons a little dry straw has been thrown upon it." It is most probable that he alludes to the tree at Beddington, as he frequently mentions in his diary having been there.

Parkinson informs us that he had three varieties of myrtle growing in his garden in 1629, which were the broad-leaved, and two varieties of the box-leaved.

The myrtle is not so tender a plant as is generally supposed, and there are not many gardens but what afford some situation where this elegant evergreen will grow, particularly if it be slightly covered from the frost in the winter; and it is much less likely to be killed by the cold when planted in the ground, than when planted in pots or tubs. Unfortunately; this plant is just too tender to endure exposed situations in the interior of this country, without some shelter or protection, but its beauty entitles it to a greater portion of our care, than it receives at present. It might even be preserved on the lawn by placing a light iron cage over it in the winter, that might be covered with moss or pannels of some ornamental design. It has always been observed that the myrtle thrives best in the sea air, on which account some suppose it to have been dedicated to Venus; and it is found just hardy enough to prosper in the southern and western coasts of England without cover. We have noticed very fine trees of the broad-leaved or Roman myrtle, growing in Devonshire, and in the Isle of Wight, where it stands detached from any buildings, and is so common, that we have observed it in cottage gardens covered with linen hung out to dry. It

grows freely in the neighbourhood of Worthing, and does not seem particular as to aspect, as we have observed trees of considerable height covering the east front of a cottage at Lancing, as well as the rectory house at Broadwater. In Worthing we have frequently known it ripen its fruit, and perfect its seed, in a western as well as in a south aspect. These trees are all of the common broad-leaved variety, which is often called the flowering myrtle, because it blossoms more freely in this country than some other varieties. But we have seen a fine tree of the rosemary-leaved myrtle, growing in the south front of Mr. Upperton's house, at Sompting, two miles from Worthing, which is annually covered with blossoms. In September 1821, it measured eleven feet in height, and spread ten feet in breadth, the stem near the ground was eighteen inches in girth. This tree formerly belonged to Mr. Whicher of Petworth, and is known to be considerably upwards of forty years old. The flowers of this variety are smaller, but not less beautiful, than those of the Roman myrtle, as its petals are agreeably proportioned to the size of its foliage.

We shall pass over the double-flowering

myrtle, and other tender varieties, which belong to the green-house or conservatory.

“ Where,
Unconscious of a less propitious clime,
May bloom exotic beauty, warm and snug,
While the winds whistle and the snows descend.”

COWPER.

The myrtle loves a warm dry soil, and is propagated by cuttings, which should be taken from vigorous young shoots, in July. These should be about five or six inches in length, and the leaves of the lower part stripped off, and the part twisted which is to be placed in the ground. The earth should be of a rich and light nature, and pressed tight to the cuttings. The pots should then be placed under the frame of a hotbed, and plunged either into some old dung or tanners' bark, to keep them moist. The pots will require water every few days; and carefully shaded from the sun, in about six weeks they will have taken root, when they should be gradually inured to the open air.

The double-blossomed, and other varieties of narrow-leaved myrtles, may be inarched upon the common kind; but this adds more to the curiosity of the plant than to its beauty.

The Italian ladies still consider the tree of Venus to be favourable to beauty, and they therefore drop into their baths a water distilled from the leaves of this tree, whose fragrance they prefer to the most costly essence of the Eastern nations .

OAK. — See *Pomarium Britannicum*.

PASSION FLOWER. — PASSIFLORA.

Natural order, Cucurbitaceæ. Passifloræ,
 Juss. *A genus of the Monadelphica Pentan-*
dria class.

“ Les Grenadilles éclatantes,
 Allongeant leurs flexibles mains,
 Escaladent le front des plantes,
 Et s'unissent à leurs destins.”

THIS superb genus of climbing plants, of which we have now so splendid a collection in this country, was unknown before the treasures of the western world were discovered by Columbus. Its ancient American name is *Murucuia*, or *Maracoc*; but when first found by the Spaniards in South America, they called it *Granadilla*; from a resemblance they conceived the fruit to bear to that of the pomegranate, which is named *Granadilla* in Spanish. It appears to have been cultivated in Europe about the end of the sixteenth, or very early in the seventeenth century, as we find it pictured by Dr. Aldine, in 1620, from a plant that had flowered in the garden of

Cardinal Farnesius; as also in a work that was published, in 'folio, at Rome, in 1625, under the title of "*Exactissima, descriptio rariorum quarundam plantarum quæ continentur Romæ in horto Farnesiano. Tobias, Aldinus Cesenatensis, Card. Odoardi, Farnesii Medicus.*" It was also figured in a work, entitled, "*Theatrum Floræ Johannis Robini*, published at Paris in 1612, and by Parkinson, in 1629, who tells us, that it had not then produced fruit in England.

When it was first introduced into Italy, superstition found a mysterious representation of the passion of Christ in this flower; and the crafty, who are always ready to impose on the credulous, soon turned this vegetable prodigy to account. The plant was pronounced a miraculous emblem of the sufferings of the Son of God, and received the sanctimonious titles of *Fior della Passione*, *Flos Passionis*, and *Christi Passionis Imago*. The leaf of the plant was expounded to be the spear which pierced the side; the twined, thready substances of red and white, which form the crown of the flower, and which nature seems to have intended as a security for the nectar, were made to represent the lashes of the whip tinged with blood; the fine encircling stamens

the crown of thorns ; the column in the centre of the flower, a miniature of that, which served in the flagellation ; the three clavate stigmas, the three nails used in the crucifixion.

To such a height was this ridiculous fantasy carried, that figures of the flowers were manufactured for devotional purposes, instead of the presumptive symbol ; and so well did the makers of these religious flowers understand their trade of deceit, that they substituted iron nails for the stigmas, and a wreath of real thorns for the thready rays of the flower. But let us not from this anecdote judge too severely of the religious superstition of all the Italians ; lest they should retaliate by representing us all as being sectaries of Johanna Southcott.

“ Beneath the covert of o’er-arching trees,
Bright Muruccia woos the cooling breeze.
The passing Indian turns the admiring eye,
Smit by the glories of her crimson dye,
And stops in pleased attention to survey
Her vivid leaves and variegated ray.
But loftier thoughts the rising mind inspire,
When warm devotion lends her holy fire.
Haply amid the convent’s virgin train,
Bosom’d in shades beyond the western main,
At rosy morn, or evening’s silent hour,
Some fair *Enthusiast* views the sainted flower,
When lo ! to rapt imagination’s eye,
Springs the sad scene of darken’d Calvary !

The thorny crown the heavenly brows around,
 The scourging thorns, the galling torments that bound;
 And nails that pierced with agonizing wound;
 Sudden she lifts to heaven her ardent eye
 In silent gaze and solemn ecstasy;
 Then, fill'd with timid hope, and holy fear,
 Drops on the flower a consecrated tear." SHAW.

Linnaeus changed the name of this genus of plants from *Flos Passionis*, by combining the words, into the technical name of *Passiflora*. This great botanist also ranged the plant in the natural order of *Cucurbitaceæ*, because the fruit has a nearer resemblance to the gourd family than that of any other fruit; but M. Jussieu has arranged it under a distinct order, since we have had so many species of this plant introduced into Europe.

The flesh-coloured passion-flower, *Passiflora incarnata* was the first variety known in Europe; but this is just too tender to endure the open air of our country, though it is sometimes planted in the greenhouse for the sake of its fruit, which is of an egg shape, but more globular, varying in size from that of the pigeon to the duck. When fully ripe, it is of a colour between a grey and a dingy damascene, with a yellowish-green pulp. The flavour is slightly aromatic, and thought to partake of that of both the melon and the

strawberry; but to us it appears more mawkish, and much inferior to either of these fruits.

The common or blue passion-flower, *Passiflora cœrulea*, which is found to thrive in the open air in England; is a native of Brazil, and was cultivated in this country by the Duchess of Beaufort, as long back as 1699, and is far more beautiful than the former variety. This species frequently sends out shoots of from ten to fifteen feet in one summer, and may be trained up more than forty feet high; and, as it is the most elegant climber known, no pleasure-grounds should be without it, either to cover trellis-work or a wall. It loves a south aspect, and will sometimes flower when permitted to climb trees that stand in warm sheltered situations. In the Brazilian forests these beautiful plants climb to the height of sixty feet, forming festoons from tree to tree, which are spangled with these brilliant stars in the most superb manner. Amongst the most conspicuous of these is the *Passiflora racemosa*, or bunch-flowered passion-flower. The petals of this species are of a fine crimson, and the rays of the crown purple, springing from a ring of a dark puce, regularly spotted with white, that has the appearance of a circle of pearls. The converging crown that covers the nectary is of a fine green.

The corolla, before it expands, has the form of a balloon purse ; and as the extremity of the branches hang loaded with the buds in a progressive state, it has a most lovely effect.

This species of passion-flower was observed by the late Mr. E. J. A. Woodford, growing wild in the shade of the woods, near the shore, about three miles from the city of Rio Janeiro. Mr. Woodford conveyed it to Lisbon, where he cultivated it with success. In its native country, it blossoms in November and December, producing generally two stems from the same stock, one of which proves fertile, and is without leaves, while in that state ; the other remains barren and in leaf, but becomes fertile in its turn the succeeding year. It was thought that this beautiful plant could only be made to thrive in the stove ; but we saw, in the summer of 1821, a fine plant of this kind in full flower, in a conservatory belonging to the Earl of Egremont, at Petworth. The petals of these flowers are keel-shaped, and when fully expanded each blossom measures from four to five inches in diameter, and it is perfectly without scent.

The square-stemmed passion-flower, *Passiflora quadrangularis*, is the most magnificent of all the varieties yet known ; and the flowers

which are the largest, display in colouring the happiest harmony combined with gaiety that can be conceived ; the whole resembling a well disposed mass of gems, including all the tints of amethyst, ruby, garnet, topaz, turquoise, and emerald, sprinkled with jet and pearls. This fine flower requires the heat of a stove in our climate, but in the West Indies it is much cultivated as an ornamental climber for arbours and covered walks, for which its rapid growth, large foliage, and beautiful and fragrant bloom, make it admirably adapted ; but the advantage of this splendid covering is more than counter-balanced by the danger which lurks in its shade, as it is said to be peculiarly liable to be infested by the most noxious serpents, who haunt it for the sake of the mice and squirrels that feed upon the fruit, and are the favourite prey of these reptiles. The fruit of this species of passion-flower is nearly as large as the egg of a swan, but of a more oblong shape, and of a grateful sweetish acid taste. It is grown in great perfection in the hothouse of the Comtesse de Vandes, at Bayswater, near Kensington, and was cultivated in England as long back as 1760, by Mr. P. Miller.

The common passion-flower generally sends up numerous suckers, by which it is

commonly increased. It may also be propagated by laying down the branches, which will be well rooted in one year, when they may be taken from the old plant, and placed where they are to remain. The cuttings will also take root, if taken in the spring before they begin to shoot, and planted in a loamy soil, not too stiff. These require to be covered with hand-glasses until they put out shoots, when air must be admitted to them. But the plants raised by these means seldom produce much fruit; and therefore it is more desirable to cultivate them by seed, which should be sown upon a good hotbed in the spring; and when the plants are fit to remove, they should be planted in small pots, filled with good kitchen-garden earth, and plunged into a bed of tanners' bark. The following spring they may be turned out of the pots, and planted against a wall in a south aspect.

POMEGRANATE.—See *Pomarium Britannicum*.

PINE. — PINUS.

Natural order, Coniferae. A genus of the Monœcia Monadelphica class.

“ To loftier forms are rougher tasks assign’d,
 The sheltering oak resists the stormy wind,
 The tougher yew repels invading foes,
 And the tall pine for future navies grows.”

BARBAULD.

ETYMOLOGISTS differ considerably respecting the derivation of the generic name of this species of resinous trees. Linnæus places *Pinus* amongst the Latin names of unknown origin; and Martyn leaves it unexplained, in his splendid edition of Miller’s Gardener’s Dictionary; but the lexicographers are mostly content to refer to its Greek synonym *πίτυς*; and it is possible that both words had the same source. M. Pirolle derives it from the Greek *pityls*, and *Pinos* from the adjective *piôn*, fat, because they extracted pitch and turpentine from these trees; but De Theis deduces *Pinus* from the Celtic, and shows it to exist, variously modified, in all the dialects of that ancient language, its basis being *pin*

or *pen*, a mountain or rock ; whence we have the Apennines ; the Pennine Alps, &c. The Gallic *pinwidden*, like the German *pyn-baum*, means merely a mountain-tree.

The Greeks distinguished this species of deal-tree, from that of the fir and larch, by the name of Πεύκη ; but its use in naval architecture seems to have been the same as that of the former trees, from the earliest ages.

——— *Dant utile lignum*

Navigiis Pinus.

Georg. ii.

“ The useful pine for ships.”

It is impossible to behold these towering trees with indifference, that appear to be by nature intended to support the wings of our vessels ; and thus enable us to enjoy the rarities of the most distant parts of the globe, with as much facility as if it had only been the produce of remote parts of our island. It is, therefore, with sensations of gratitude and pleasure that we should regard these resinous trees springing up, that are perhaps at some future day to be planted on the main for the defence of our country, or the maintenance of our commerce. This useful family of trees is generally found to prosper in soil and situations that would otherwise lie waste and barren, which is an important circum-

stance, as they neither lessen our quantity of grain, nor occupy ground where the oak would thrive. We have already, in the history of the fir-tree, noticed the individual advantage that may be derived from forming plantations of this tree; and the benefit is not less in a national point of view, as the country cannot be enriched without contributing in some degree to the comforts of the most humble individuals, and we are decidedly of opinion, that there is no spot to be found in this nation, but what could be turned to profit if proper attention were given as to what kind of vegetation was most suitable to the soil. We have still many thousand acres of land lying waste that would afford masts to all our vessels, from those which bring the finny tribe to our shores, to those which protect them by their wooden walls; and much as we dislike the sound of war, we would wish, in the midst of peace, to see our defensive weapons springing around us for future security.

The ornamental plantation, as a national advantage, is not duly appreciated; for it is in such situations that trees foreign to our soil have become naturalized, and their properties so made known to us, that we might judge how far their cultivation would answer

in these kingdoms ; for as the change of climate affects quadrupeds, so that those which are removed from cold countries to warmer latitudes, lose a part of their warm covering, by their hair becoming short and thin, we may naturally expect a similar change in vegetables, whose fibres may become more firm or relaxed according to the countries from whence they are removed. It was in the pleasure-grounds that the common larch, which now makes so conspicuous a figure on the face of our poorest lands, was first raised ; and the Weymouth pine, or New England larch, *pinus strobus*, was also introduced from North America by Lord Weymouth, and first planted to add grace to the grounds of the Duchess of Beaufort, in 1705. It was also planted at Sir E. Knatchbull's seat in Kent, and some few other places, from whence the seeds have been principally obtained for the larger plantations that have been formed within the last fifty years. This species of pine is distinguished from others by the length of its setaceous foliage, of a bluish green, which is produced in little bunches of five out of each sheath. The cones are also of considerable length, and pendent, and the tree altogether forms the connecting link between the pine and the larch tribe.

In its native country, it grows to the height of 100 feet, from whence great quantities of this timber are imported, under the name of white pine; and so much has it been esteemed for naval purposes, that there was a law made in the ninth year of Queen Anne for the preservation of the trees, and to encourage their growth in America.

In 1736, a tree of this species was cut down on the banks of the river Merimack, that was seven feet eight inches in diameter at the butt end; and it is now ascertained that this tree, as well as the Scotch fir and the common larch, produce a profitable and serviceable timber when planted in British soil.

In flat countries, where the timber-trees are principally oak, or other round-headed kinds, a few of these pines, by their spiry tops, give force and character to the heavy and dull sameness of the scene; and when towering over the trees of the forest, they break the uniformity of the sky outline, with an effect similar to that which the spires of churches give to towns and villages. In hilly situations, the pine plantation should occupy the most elevated spot, as it adds considerably to the grandeur of such scenery, and throws a softness on the valleys below, by the contrast of colour.

The want of judgment and taste in planting these trees, in little courts and gardens before the fronts of houses, where there is scarce room for a lilac or cherry-tree to thrive, is too conspicuous in most parts of the country; and is scarcely less ridiculous than a pair of jack-boots would appear at a dress-ball.

The Weymouth pine grows best upon a moist light soil, not too wet: it will also thrive on a loamy soil, if it does not approach too near to clay. When planted in a soft, hazel loam, it often makes shoots of thirty inches in one year; but it is not so well adapted to exposed situations, as the Scotch fir or the larch, and the seeds require to be sown with a little more care than those of the latter trees; that is, by giving them more sheltered spots, or by shading the young plants with mats from the sun, but which should be removed so as to admit the dews of the night.

ORIENTAL PLANE-TREE.—PLATANUS.

*Natural order, Amentaceæ. A genus of the
Monœcia Polyandria class*

——— “ When the sun begins to fling
His flaming beams, me, goddess, bring
To arched walks of twilight groves.” MILTON.

“ His spreading planes their pleasant shade extend,
Where he enjoys his bottle and his friend.”

LAUDERDALE'S *Virgil*.

Σέβε μ', Ἑλένας φυτὸν εἰμί. “ Reverence me ;
I am the tree of Helen.” Thus Theocritus
represents the virgins of Sparta, singing in
the Epithalamium of their princess, who
afterwards caused her husband, her hand-
maids, and her country so much woe.

This beautiful Asiatic tree, which the an-
cients consecrated to the Genii, seems to have
bewildered the mind of Xerxes, as much as
the beauty of Helen had overpowered the
reason of Paris, for Ælian tells us very seri-
ously, that this Persian monarch was so
attracted by the charms of a plane-tree which
he found in Phrygia, that he caused his prodi-

gious army of 1,700,000 soldiers to halt whilst he adorned the tree with all the jewels belonging to himself, his concubines, and the principal men of his court, until the branches were loaded with gems, necklaces, bracelets, scarfs, and ornaments of every kind. He called it his mistress and his goddess, and it was some days before he could be prevailed on to leave the tree of which he was so enamoured, and even then he caused a figure of it to be stamped on a gold medal, which he constantly wore about him. Herodotus relates that he encircled this favorite tree by a fence of gold, and that he appointed one of his suite to guard it. We are more disposed to consider that Xerxes had some political cause for this action, more than the bare infatuation which the beauty of the tree could create, unless it recalled to his remembrance some interesting circumstance of his life that was dear to his heart.

The Greeks named this tree Πλάτανος, from πλατὺς wide, on account of the wide spreading of its branches, for which, and for the beauty of its shade, it was so greatly esteemed at Athens, that it formed the principal shade in the groves, where the philosophers of that city held their discourses or retired to study.

The plane-tree was always planted on the

plots allotted to the gymnastic games of the city, and the porticoes of its sumptuous buildings generally terminated in groves of these trees.

The Romans named this fine tree *Platanus*, from the Greek, and they seem to have held it in equal veneration with their more eastern neighbours, for we read in Pliny that when it was first introduced into Italy, they irrigated the roots with wine instead of water. This author informs us that it was first brought over the Ionian sea, into the island of Diomedæ, where it was planted to ornament the tomb of that hero.

Dionysius the Tyrant brought the plane-tree into Sicily, from Rhegium in Calabria, about 400 years before the Christian era.

This tree was so highly esteemed when first introduced into France, that none of the natives were allowed to repose under its shade, without paying a tribute or tax for that purpose to the Romans.

The oriental plane-tree is thought to be so great a purifier of the air, as even to defend places which it surrounds from the plague. Evelyn says, “A worthy knight, who staid at Ispahan, in Persia, when that famous city was infected with a raging pestilence, told me, that since they have planted a greater number

of those noble trees about it, the plague has not come nigh their dwellings." The Turks in Constantinople seem to enjoy no greater luxury than that of reclining under the umbrageous boughs of these majestic trees, and smoking their tobacco in a state of perfect indifference to all sublunary things.

From accounts which we have lately received from the Sublime Porte, we conclude that no part of Europe can boast of such gigantic trees as the planes which are to be found in that neighbourhood. Lady Craven also speaks of some which she saw in the Turkish dominions, of such magnitude, that the largest trees we have in England, placed near them, would appear only like broomsticks.

It is to be regretted that no just calculation can be formed as to the age of these celebrated trees, which are only second in dignity and durability to the cedars of Lebanon. The Turks, who lop off heads with as much indifference as our gardeners cut their cabbages, preserve these trees with a religious tenderness.

Pausanias, a celebrated historian, who flourished about the middle of the second century, tells us of a plane-tree of extraordinary size and beauty in Arcadia, supposed to have been planted by Menelaus, the husband of

Helena, which would make the age of the tree about 1360 years.

Pliny also records the particulars of several remarkable plane-trees, and tells us of one in Lycia, that had a cave or hollow in the trunk, which measured 8½ feet in circumference, in which were stone seats covered with moss, and that Licinius Mutianus, when consul, with eighteen of his friends, used to dine and sup in the cavity of the tree, the branches of which, we are told, spread to such an extent, that this single tree appeared like a grove, and this consul, says our author, preferred sleeping in this hollow tree to his marble chamber, where his bed was composed of curious needlework, and canopied with beaten gold. Caligula, the tyrannical emperor, who was murdered in the year 41, A. D. had also a similar plane-tree in Velitra, which he called his nest, in the cavity of which, this haughty Roman and fifteen of his debauched courtiers used to sit and dine, leaving ample room for his train of attendance to wait on the party.

The peasants about Apamia and Phrygia showed a large plane-tree, on which they affirmed Marsyas was hanged up, and flayed by Apollo, who was incensed at his presumption, in pretending to contend with him in music. Fable pictures to our view

The Satyr's fate, whom angry Phœbus slew,
 Who raised with high conceit, and puff'd with pride,
 At his own pipe the skilful god defied.
 'Why do you tear me from myself?' he cries;
 'Ah, cruel! must my skin be made the prize?
 This for a silly pipe?' he roaring said,
 Meanwhile the skin from off his limbs was flay'd.

CROXALL'S *Ovid*.

• The oriental plane-tree called *dulb* by the Arabians, appears to have been first introduced into England about the middle of the sixteenth century, as Turner says in his *Herbal* of 1568, "I have sene two very yong trees in England, which were called there Playn trees. Whose leues in all poyntes were lyke vnto the leues of the Italian Playn tre. And it is doutles that these two trees were either brought out of Italy, or of som farr countre beyond Italy, wherevnto the freres, monkes, and chanones went a pylgrimage." Gerard does not notice having seen the plane-tree in this country in 1597; but he tells us that his servant, William Marshall, whom he sent as surgeon in the *Hercules* of London, found these trees growing in Lepanto in Greece; from whence, says Gerard, "he brought one of those rough buttons, being the fruit thereof."

Our noble philosopher, Bacon, seems to have been one of the earliest planters of the

plane-tree in this country ; but that he was not the first we have already shown from Turner. Evelyn says, “ The introduction of this true plane among us is, perhaps, due to the great Lord, Chancellor Bacon, who planted those (still flourishing ones) at Verulam ; as to mine, I owe it to that honourable gentleman, the late Sir George Crook, of Oxfordshire, from whose bounty I received an hopeful plant now growing in my Villa.”

Goodwood Park in Sussex has long been celebrated for containing one of the finest oriental plane-trees in Europe, excepting perhaps those in the vicinity of Constantinople.

Miller notices that there were very few large oriental plane-trees to be seen in this country ; which he thinks might be owing to the great esteem persons of the last age had for the lime-tree, which being much easier to propagate, and of quicker growth during the first three or four years, became more fashionable for avenues and shady walks near habitations. As the stately avenues have now nearly disappeared, we may perhaps see this celebrated tree of the ancients become fashionable again in our plantations, for although it is late in putting forth its leaves, and sheds them again early in the autumn,

yet no tree affords a more agreeable shade than the plane, during the summer months ; and it is worthy of remark, that the foliage of this tree) like that of the lilac, mulberry, and walnut, which are also eastern trees, is never injured by insect or blight. The eastern plane-tree has also the quality of cleansing its trunk from moss and other parasitical incumbrances, by annually throwing off its bark.

The leaves of the plane-tree are about seven inches long, and eight inches wide, deeply cut into five segments, and are what are termed palmated leaves : the upper surface is of a deep green, and the under side pale. The flowers come out upon long peduncles, hanging downward ; and the seed or fruit is of a globular shape, and gracefully suspended from the branches, until it falls to pieces ; when the seeds, which are covered by a kind of down, are transported to a considerable distance by the wind. Thus nature has provided them with wings, that as they require much room for their growth, they may be scattered thinly over the country.

——— “ There lives and works
A soul in all things, and that soul is God,
The beauties of the wilderness are his.”

COWPER.

The plane-tree seems designed by nature

to stand singly, for its lower branches shooting horizontally, soon take a direction to the ground, and offer a more delightful retreat from the midday sun, than any tree in the park. We have frequently remarked that this Asiatic tree thrives better in the smoky atmosphere of our metropolis than most other trees; which should induce the planters, in the immediate vicinity of London, to cultivate it more generally. Dr. Hunter tells us, that a plane-tree which was eight feet high, was planted at Shadwell Lodge, in Norfolk, the seat of John Buxton, Esq., in April 1744, which in April 1775, was sixty-five feet nine inches high; the girth at half a foot from the ground was seven feet nine inches; at twenty feet, four feet six inches.

Ricciolus says that the Turks used to build most of their ships with this timber. It is said to be close and hard, and to take a fine polish; and is useful for a variety of purposes. It is raised generally from layers, but these seldom produce so fine trees as those obtained from seed, which should be sown when ripe, in a moist and shady situation. This tree may also be propagated by cuttings, which should be planted early in autumn in a moist, good soil.

The American plane-tree, *platanus occi-*

dentalis, grows naturally within the same latitudes in the western world, that the *platanus orientalis* flourishes in the East. The American plane appears to have been known to us about two hundred years, as Johnson says in his edition of Gerard's Herbal, printed in 1633. "There are two young ones at this time growing with Mr. Tradescant;" and Parkinson states, that "the American plane-tree was introduced by Mr. John Tradescant, jun."

This species of plane-tree is now much more common than that of the East, although it is not superior to the latter in any particular. Mr. Gilpin tells us, that one of the finest occidental planes stood in his garden at Vicar's-hill, where its boughs, feathering to the ground, formed a canopy of above sixty feet in diameter.

These trees love a moist soil, and should therefore be plentifully watered when young, which will ensure them as rapid a growth in modern times, as the irrigating them with wine did in ancient days.

Tantumque postea honoris increvit, ut mero infuso enutrientur: compertum id maxime prodesse radicibus; docuimusque etiam arbores vina potare.—PLIN.

• POPLAR.—POPULUS.

*Natural order, Amentaceæ. A genus of the
Diaccia Octandria class.*

“ And poplar, that with silver lines its leaf.” COWPER.

“ The poplar is by great Alcides worn.” VIRGIL.

——— “ A double wreath Evander twined,
And poplars black and white his temples bind.” IB.

THESE towering aquatic trees, which the Greeks named *Λεύκη*, and *Αίγειρος*, were, in ancient times, held sacred to Hercules, who wore a crown, composed of the foliage of the poplar, in his descent to the infernal regions. The ancients, who had a fable for every subject for which they could not find a philosophical reason, thus accounted for the different hues which the leaf has on its opposite sides. The leaves of which the hero's crown was composed, on the side next his head, retained their natural pale colour, or, as some say, received that pallid hue from the perspiration of his brow; but the other side, being exposed to the smoke and noisome vapours of the dismal dominions he was visiting, took a darker tint, which they still retain.

The poplar was dedicated to Hercules, in consequence of his destroying Cacus in a cavern adjoining to the Aventine Mount, where these trees formerly abounded.

“ From that blest hour th’ Arcadian tribe bestow’d,
 Those solemn honours on their guardian god.
 Potitius first, his gratitude to prove,
 Adored Alcides in the shady grove;
 And with the old Pinarian sacred line
 These altars raised, and paid the rites divine,
 Rites, which our sons for ever shall maintain;
 And ever sacred shall the grove remain.
 Come, then, with us to great Alcides pray,
 And crown your heads, and solemnize the day.
 Invoke our common God with hymns divine,
 And from one goblet pour the generous wine.
 He said, and with the poplar’s sacred boughs,
 Like great Alcides, binds his hoary brows.”

PITT’S *Virgil*.

All those who had gloriously conquered their enemies in fight, wore a garland of the branches of the white poplar, from the example of Hercules.*

It is related that Homer first recited his matchless verses beneath a poplar. This king of poets says, in the *Iliad*, that the buckler of Ajax, son of Telamon, was made by a skilful workman of Hyle, named Tychius; and, it is pretended, that it was through gratitude that

* The altar of *Hercules*, *Ara Maxima*, was at Rome, between the Aventine and the Palatine mountains, in the open place called *Forum Boarium* (the ox market).

Homer made mention of this artist, because, when in want of subsistence, this great poet had been kindly received and treated by a currier of Hyle, in Bœotia, named Tychius; and for many ages the place was shown where Homer recited his verses to his host, under the shade of a poplar. From the beautiful manner in which the author of the Iliad compares the fall of Simoïsïus, by the hand of Ajax, to a poplar just cut down, we may conclude that it was a favourite tree with this celebrated Greek writer. Pope thus translates the verse :

“ So falls a poplar, that in watery ground
 Raised high the head, with stately branches crown'd,
 (Fell'd by some artist with his shining steel,
 To shape the circle of the bending wheel)
 Cut down it lies, tall, smooth, and largely spread,
 With all its beauteous honours on its head.”

Ovid notices the poplar as the tree on which lovers wrote their verses. In the epistle from CEnone to Paris it is thus mentioned :

“ There grows a poplar by the river side,
 Whose trunk engraved records my once loved name:
 Live, poplar, live, that wavest o'er the tide
 With this memorial of my lover's shame :
 ‘ When Paris flies, and reckless of his love,
 ‘ Can breathe unblest by his CEnone's eyes,
 ‘ Then Xanthus backward from his course shall move,
 ‘ And to their fountain-head his waves shall rise.”

H. P. jun.

The poplar is a native of Europe, and has been found growing naturally near rivers and brooks from Italy to Sweden, as well as in Siberia and Barbary :

“ The stately poplars o’er our fields that grow,
Admit their brethren from the distant Po.”

DELILLE.

The banks of the Po have ever been celebrated for these spiral trees, on which, account some writers have thought that the sisters of Phaeton were changed into poplars ; but this does not appear from Ovid, as we have noticed in the history of the larch, yet it is slightly alluded to by Virgil in the 10th book of the *Æneis* :

“ For Cycnus loved unhappy Phaeton,
And sang his loss in poplar groves, alone,
Beneath the sister shades.”

Sterne, in his *Sentimental Journal*, has pictured Maria sitting under a poplar, in such forcible melancholy colours, that when we see this tree in rural situations by the side of a brook, we almost expect to meet the “ hapless damsel,” or hear “ the evening service to the Virgin,” or a tale of woe, told by the “ sweetest notes ” of her plaintive pipe :

“ ’Twas near a thicket’s calm retreat,
Under a poplar tree,
Maria chose her wretched seat,
To mourn her sorrows free.”

Notwithstanding that we might avail ourselves of the authority of the British Botanist, and the able compiler of the Hortus Kewensis, for claiming both the white and the black poplars as natives of this country; yet, from our own observations, and the remarks of our oldest writers on the subject, we do not feel justified in pronouncing both of them aboriginals of our soil. Turner says, in 1568, "As touching the whyte asp, I remembre not that euer I saw it in any place of England. But I haue sene it in great plentye in Italy, by the ryuer sede of Padus; where, as it is called albera, and in hyghe Germany by the reuer syde, where as it is called saurbaum. If it be found in England, it may be called a whyte asp, or a whyte popler." Gerard, who wrote about thirty years after Turner, says, "The white poplar groweth not very common in England, but in some places heere and there a tree: I found many both small and great growing in a lowe medow turning vp a lane at the further end of a village called Black-wall, from London; and in Essex at a place called Ouenden, and in diuers other places." We do not find any old English name for these trees, as the word poplar is as evidently from the Latin *populus*, or the French *peuplier*, as the name of abele is from the low Dutch

abeel, a name which they gave to this tree on account of its hoary or aged colour.

The Lombardy or Po poplar, *populus dilatata*, whose tapering form so conspicuously marks it from all other deciduous trees, is said to have been first introduced into this country by the Earl of Rochford, who planted it in Essex, about the year 1758; since which time it has, from its easy propagation and quick growth, spread itself throughout the country; and on this account it is not generally admired, because we too often meet with these vegetable grenadiers injudiciously planted, either in single rows, or in enclosing small gardens, and for which we have but few trees worse calculated.

The planting of the Lombardy poplar should have been confined to the hand of the landscape planter, when we should have found it one of the greatest ornaments of our sylvan scenes, as its shape contrasts so singularly with our native forest trees, without any offensive harshness, and particularly when it rises in clumps of two or three trees in the midst of the plantation. In some situations we have found a detached poplar give good effect, and in others a plantation of them have added considerably to the beauty of extensive grounds; but so much depends on the

general arrangement of the groves, and the undulation of the ground, that it is scarcely possible to give directions where to plant this Italian tree, without being on the spot. However, we may venture to recommend its being planted in places where it is desirable to break the uniformity of the sky line. This tree possesses one beauty peculiar to itself, which is its waving mien when agitated by the wind, for its whole body bows in as graceful a manner as the bending corn; whilst other trees have only their foliage, or smaller branches, moved by the air, and although it does not catch masses of light in the happy manner of the elm, yet the quivering playfulness of its foliage is both agreeable to the eye and the ear.

The value of different timber-trees in different countries, depends greatly on the customs and habits of the people. In the plains of Naples, where there is a demand for this soft wood, it is customary for a peasant, on the birth of a daughter, to plant a row of poplar trees, which are cut down and sold at the end of seventeen years, to make up a fortune for her; for it is not customary in that country for a young man, however poor he may be himself, to take a portionless wife.

In many parts of Italy, the poplar is still

planted as a support to the climbing vine ; and the vine-dresser may now be seen, as of old, swinging on a rope, formed of twisted willows, whilst he trims up the poplar, or prunes its luxuriant spouse ; and his voice is still heard abusing the lads and lasses, as they return from market, with the same gross wit and low jests that gave such zest to the farces of Atella in ancient times.

In Lombardy, all the vessels in which the grapes are carried from the vineyards, are formed of poplar planks, of about two inches thick, and in them the grapes are squeezed. These vessels are said to last from thirty to forty years ; and their lightness is also a considerable recommendation, as these troughs are often of a size that will contain upwards of fifteen hundred weight of grapes.

We are assured that thirty acres of this wood, when fit to cut, are worth in Italy about four thousand pounds. The trunk of the poplar, when about two feet in diameter, and thirty feet in length, which size it attains in about seventeen or eighteen years, is sold in Lombardy to the dealers for twelve or fifteen shillings. It is cut at the water-saw mills whilst green, into thin boards, for packers of bales of woollens, boards to put in the middle of silk pieces, or other manufactures, and also

for boxes and packing cases, as the lightness of the wood saves much expence in carriage, and nails do not split the poplar plank, which is also a recommendation to this wood, and it rather gives way than splits when thrown to the ground.

The timber of the Po poplar is said to be inferior to the common black poplar, but it is in demand for many purposes where soft wood is required, and vast quantities of wooden shoes are made from it in France and other parts of the continent. It answers tolerably well for floors and other purposes where it is not exposed to the weather. For packing cases we can have no better wood, which will always ensure it a good sale in this mercantile country.

A correspondent in Young's annals affirms, that this kind of poplar is fit to cut for building purposes in twelve years, and that at eight years' growth, it is forty feet high. For rafters, small beams, studs, boards, &c. he says, they have stood sixteen years without the least decay, having been brushed over with oil, tar, and brickdust laid on hot.

The growth of this tree, like that of most others, depends upon the soil and situation in which it is planted. Mr. Young, in his Irish tour, mentions some Lombardy poplars

which grew to the height of thirty-five feet in five years, and many at two years old to the height of twelve feet. Martyn says, “ I have measured one of my own trees, which has been planted about twenty-five years, and find that it measures six feet five inches round, a foot above the ground, and six feet, at the height of five feet ; it is sixty-three feet five inches high, and has not increased so much in height as in girth, for some years past.”

The most extraordinary trees of this kind, that we have seen, were in a swampy situation on the borders of the Seine, near Rouen, in Normandy, where they seemed aspiring to reach the height of the towers of the cathedral of that city. These trees had not been planted more than about twenty years ; yet their height is such, as to make it quite awful to walk in the avenues. The moisture of the soil in which they are planted, and the height of the mountains that shelter them, have both contributed to draw them up in an extraordinary manner.

In some parts of Flanders great profit is made by planting the common kinds of black and white poplar ; and the like advantage would be made in this country, were more attention paid to planting these trees in boggy

and waste lands, where neither corn or grass will prosper; but it seems a fashion rather to let these plots of ground lie waste, than to plant them with trees to which the soil is suitable, although, if their speedy growth and small expense in planting be taken into consideration, it would be found perhaps more profitable by making quick return, than the oak or elm, which require good soil and ages to render them advantageous. Poplars have been known to drain moist ground so effectually, and to manure it by the fall of their leaves, so as to render it fit for meadow or pasture land.

These trees are propagated by cuttings, which should be planted in the spring; they should be taken from the most vigorous shoots of the last year, or at most, not above two years' growth; these should be planted about a foot deep in the earth, and it is advisable to rub off all the side shoots for the first year or two which gives strength to the young plants.

All the kinds of poplar are alike bad wood for fuel, as it rather roasts away than burns, giving a great deal of smoke, but no flame. On this account it is desirable for building of cottages and stables, &c., as the boards are so slow in taking fire, that the flames are said

to have been stopped at that part of a building on fire, where this timber had been used.

We shall pass over in silence the many books that have been written on the medicinal qualities of every part of this tree, as we do not find that our forefathers were exempt from the pains of the gout, although they assure us, that the leaves of the poplar are an infallible cure for this vexatious complaint.

The buds of both the white and the black poplar, have an agreeable perfume early in the spring, and when pressed between the fingers yield a balsamic resinous substance, which extracted by spirits of wine smells like storax.

The flowers of the poplar have but little attraction, excepting to the bee and the botanist ;

“Swung in the wind the poplars nod in love ;”

whilst the bee collects the superfluous pollen to convert into waxen cells.

Scheffer, whose industry and ingenuity almost equalled that of the inhabitants of the hive, collected the cotton down which covers the seeds of these trees, and converted it into paper.

PORTUGAL LAUREL. — PRUNUS LUSITANICA.

*Natural order, Pomaceæ. Rosaceæ, Juss.
A genus of the Icosandria Monogynia class.*

“ Hail, Albion, native country ! See, how changed
Thy once grim aspect ! how adorn'd and gay
Thy howling forests, where together ranged
The naked hunter and his savage prey ! ” WEST.

THIS beautiful evergreen, which is one of the greatest ornaments of our shrubbery, was first obtained from Portugal, on which account it is called the Portugal laurel, although it is very doubtful whether it be a native of that soil. The French name it *Laurus Maderiensis*, and in their own language, *Laurier de Madère* ; and we are disposed to believe, that it is indigenous to the Azores as well as Madeira. The Azores lie in the same latitude with Portugal, and the Portuguese name for this plant is *Azoureiro*, which strongly indicates their having procured it from these islands.

Knowlton's manuscripts inform us, that it was first cultivated in this country by Mr. Thomas Fairchild, in 1648.

Miller, who calls the common laurel the cherry-laurel, calls this species the cherry-bay, and he observes, in 1724, that, "it holds out our hard winters best on our coldest and openest grounds, and is a glorious tree for standards on most grounds."

It is with great delight we see, of late years, even our native woods interspersed with exotic timber-trees, and in many instances embellished with foreign flowering shrubs. The forest of St. Leonard's, in Sussex, which we remember a most gloomy and desolate waste, the retreat of footpads and contraband dealers, is now become one of the most embellished parts of the country; and we behold with surprise, groves of valuable timber spring up in spots where we were formerly told a rabbit could not find subsistence.

"Waste sandy valleys, once perplex'd with thorn,
The spiry fir and shapely box adorn." POPE.

These agreeable metamorphoses are principally owing to the spirited manner in which the grounds have been cleared and planted by Lord Erskine, Charles George Beauclerc,

Esq., John Aldridge, Esq., George Matcham, Esq., — Knowles, Esq., — Sugden, Esq., and others ; who will eventually reap as profitable a harvest from these sylvan scenes, as they collect from their richer valleys where Ceres reigns ; and we may add from Crabbe,

“ Thy walks are ever pleasant ; every scene
Is rich in beauty, lively, or serene —
Rich — is that varied view with woods around,
Seen from the seat, within the shrubbery bound.”

The Portugal laurel has hitherto been planted only as an ornament to the shrubbery ; but we would strongly recommend its being cultivated in the forest we have just noticed, as well as in other plantations ; and not for its beauty alone, but for its fruit also, which is, as well as the fruit of the common laurel, the favourite food of the pheasant. It is desirable to draw these beautiful birds from the fields of the farmer, by furnishing them with food in our forests ; and it is well known that birds which feed on berries have a much finer flavour than those that are bred in cornlands.

Pheasants are natives of and originally came from the same spot from whence the common laurel was first brought, that is from the banks of the ancient river Phasis that

flows into the Black Sea, and from which they received their name, being called by the Greeks Φασιανός. The Latin *phasianus* is the same, and our pheasant, and the French *faisand*, have the same derivation. .

The Portugal laurel ripens its fruit in October, which is a drupe of a dark purple colour and spicy flavour. The seed is contained in a nut or stone similar to that of the cherry, but more pointed at the top; and smaller than that of the common laurel. The wood of the Portugal laurel appears to be nearly as hard as that of box; and as it grows with a strong tree-like stem to the height of twenty or thirty feet, it may turn to account as a substitute for box-wood.

It has a fine effect in the plantation during the month of June, when it is often covered with long pendent racemes, or strings of white rosette flowers, opening in succession from the top of the flower-stalk, whilst the buds are gradually diminished to the end, like pearl-beads set in the most graceful manner. The branches are covered with a shining purplish bark, and the young wood and leaf-stalks are of a fine red tint, which contrast most happily with the lucid green of the upper surface of the leaf; whilst it harmonizes in an equally agreeable manner with the pomona green of

the under side. These leaves hang much more gracefully than those of the common laurel, and are not so liable to be injured by the frost in severe winters.

The severe winter of 1740, which killed most of the common laurels, scarcely affected the Portugal laurel, and although these shrubs were injured by the frost in January 1776, most of them recovered when cut down. They love a loose moist soil, not too wet, but will thrive in most kinds of earth; although they do not prosper so well when planted in a very dry soil, or in ground that is over wet. The finest trees are raised from seeds, as they are then more disposed to take an upright growth. To obtain the seeds perfectly ripe, it is necessary to protect them from the birds. They should be sown in drills as soon as gathered; for if kept until the spring, they will not germinate until the second year. It is advisable to cover the beds with any light litter that will protect the ground from the frost, and to keep the young plants moist by watering should the summer prove dry, by which means they will be fit for transplanting the following autumn.

The best season for propagating these trees by cuttings is about the end of September, as soon as the autumnal rains fall to moisten

the ground. The cuttings should be from the same year's shoots, and if they have a part of the former year's wood to their bottom, they will more certainly succeed, and form better roots. They should be planted about six inches deep, and the earth pressed close to them. When increased by layers, the young branches should be laid down in the autumn, and they will take root in one year, when they may be detached from the parent stock, and removed to the nursery.

PRIVET. — LIGUSTRUM.

*Natural order, Sepiariæ. Jasmineæ, Juss. A
genus of the Diandria Monogynia class.*

“Alba ligustra cadunt, vaccinia nigra leguntur.” VIRGIL.

“Nor will the breast where fancy glows
Deem every flower a weed, that blows
Amid the desert plain.” SHENSTONE.

“But who their virtues can declare? who pierce
With vision pure, into these sacred stores
Of health, and life, and joy.” THOMSON.

THIS native shrub is one of the prettiest ornaments of our hedgerows, which it continues to embellish for a longer period than most other plants; for, although it is deciduous, the leaves seldom fall until thrust off by those of the succeeding spring. And its spike-formed thyrsi of white monopetalous flowers, which in shape resemble those of the lilac in miniature, are in blossom from the beginning of May to the end of June, agreeably perfuming the hedges; and its clustering bunches of deep purple shining berries garnish the spray of this shrub during the whole

winter, affording food to the bullfinch and thrus, and a

“ Fit dwelling for the feather’d throng,
Who pay their quit-rents with a song.” GREEN.

The leaves of the privet feed the *sphinx ligustri*, or privet hawk moth; and the *phalæna syringaria* is also nourished by it in the caterpillar state; and *meloe vesicatorius*, *cantharides*, or blister-beetle, is found on it.

The leaves being bitter and slightly astringent, are but seldom eaten by cattle; horses refuse it entirely, but kine, sheep, and goats, will sometimes browse on it.

It is a valuable plant in the shrubbery, as it grows well under the drip of trees, and bears clipping, which makes it desirable in those situations where it is necessary to form hedges, either for shelter or ornament, and as it has only fibrous roots, it impoverishes the ground less than any other shrub.

The privet is not liable to be injured by insects or blight, and it is found to be one of the few plants that will thrive in the smoky atmosphere of the squares or gardens of London, but it seldom produces flowers in these confined situations. In open places it arrives to the height of six or seven feet, and the

wood becomes hard and fit for the use of the turner.

We learn from Pliny, that the berries of this shrub were in ancient times given to chickens to cure them of the *pepia*, or pip, a disease that often destroys whole broods of poultry, and which is caused by a thin white skin or film that grows under the tip of the tongue, and hinders their feeding. It usually arises from want of water, or from the drinking of puddle-water, or eating filthy meat. It may be cured by pulling off the film with the fingers, and rubbing the tongue with salt. Hawks are particularly liable to this disease, especially from feeding on stinking flesh.

“ See man from nature rising slow to art !
 To copy instinct then was reason’s part ;
 Thus then to man the voice of nature spake —
 Go, from the creatures thy instruction take :
 Learn from the birds what food the thickets yield ;
 Learn from the beasts the physic of the field.”

POPE.

Old medical writers tell us that the leaves and flowers of privet are cooling, drying, and restringent, good for ulcers and inflammations of the mouth and throat, bleeding of the gums, and relaxation of the uvula.

The leaves of this plant give a faint tinc-

ture of red to blue paper ; but the flowers and fruit give it much deeper. From this and the chemical analysis, it was conjectured that there was an aluminous salt involved in a great deal of sulphur in the leaves, but that this salt is very much disengaged from it in the flowers and fruit. It yields a great quantity of oil and acid liquor by distillation, as well as a little urinous spirit. All these principles mixed together, are thought to render the privet very detersive.

The gargarisms made of the juice or distilled water of this plant, were formerly much used for the diseases of the throat, as they were supposed to dry away ulcers, and also to assuage the inflammations of the eyes, and scalds, &c., and were said to stop the spitting of blood, and cure hæmorrhages.

This plant is indigenous to most temperate climes, but it is said not to be found in Poland. The Greeks called it Φαλ-
λυρέα (Phillurea), the Latins *Ligustrum*, the
Arabians *Mahaleb*. In Spanish it is named
Alfena and *Alhena*, in Portuguese *Alfena*, in
Italian *Ginstrico*, in German *Liguster Rhein-
weden*, and *Mundholtz*, in Russian *Schost*, in
Dutch *Keelcruyt*, in French *Troëne*, and in
English it was formerly called Prim, Print,
and Primprint, from being, as is supposed,

kept clipped in a neat manner. Parkinson tells us that it was used to cover arbours, bowers, and banqueting-houses, and he adds, " it is wrought and cut into many formes of men, horses, birdes, &c. as the workmen list, supported at the first with timber, poles, and the like, but afterwards groweth strong of itselfe, sufficient to hold it in the forme it is made into." The same author tells us, that the berries were dried with the young branches, and ground into powder, which formed a considerable article of commerce with the Turks, who used it to give a yellow colour to their hair, hands, and nails, and that they also dyed their horses' manes and tails with this powder, to make them gay on festival days.

The Italian or evergreen privet, is now generally supplied by our nurserymen, as it is equally hardy and the flowers something larger; but this variety seldom produces fruit in England, and therefore is not so valuable in the plantation as our native kind of privet.

The best plants are raised from seed, which should be treated in the same manner as the direction given for sowing the holly-berries. It is easily propagated by laying down the young shoots in autumn, and it may be increased also by cuttings, as well as by the suckers, which it sends forth in great plenty.

The foliage of this shrub is of a purplish green, and it agrees well with the yellower tints of the common laurel. When planted with box or other dwarf evergreens, its clusters of shining berries have a good effect in the winter months.

From the pulp of the berries, a rose-coloured pigment may be prepared. With the addition of alum, they dye wool and silk of a good durable green; for this purpose they must be gathered as soon as ripe.

ROSE.—ROSA.

*Natural order, Senticosæ. Rosaceæ, Juss. A
genus of the Icósandria Polygynia class.*

“ I am the Rose of Sharon.” SOLOMON’S *Song*, ii. 1.

“ The wilderness and the solitary place shall be glad,
and the desert shall rejoice and blossom as the rose.”

ISAIAH, xxxv. 1.

“ The nightingales warbled their enchanting notes, and
rent the thin veils of the rose-bud and the rose.” JAMI.

“ Rose ! thou art the sweetest flower
That ever drank the amber shower ;
Rose ! thou art the fondest child
Of dimpled spring, the wood-nymph wild !
Even the gods, who walk the sky,
Are amorous of thy scented sigh ; —
Cupid too, in Paphian shades,
His hair with rosy fillet braids.”

MOORE’S *Anacreon*, Ode 44.

“ The rose abashed, with a comely blush
Unveils her virgin cheeks, and to the gods
Due honours pays, and with its fragrant smell,
Sabæan odours like, perfumes their domes.”

COLUMELLA, *lib. x.*

“ Non è, non è la porpora
De la Monzese rosa,
Non e de la muscosá
Il vermiglio gentil.

Par quel langour vezzeggiano,
 Le piu soavi aurette,
 Ne miglior don permette
 A Vergin crine April.
 Esce da l'umil calice
 Cinnamomea fragranza,
 Onde l'indica stanza ;
 Flora cotanto amò,
 E Nice, che in lei beasi,
 Sorride in cuore e pensa,
 Che ben virtù compensa
 Quando beltà mancò."

MONTANI.

" Aimable rose ! au lever de l'aurore,
 Un essaim de zéphyrs badine autour de toi ;
 Chacun d'eux jure qu'il t'adore,
 Chacun d'eux et promet une éternelle foi.

Mais le soleil, en se couchant dans l'onde,
 Voit à leurs tendres soins succéder le mepris :
 La troupe ingrate et vagabonde
 Te déserte sans scrupule avec ton coloris.

Les Amours de Leucippe.

" Thy scented buds life's joys disclose,
 They strew our paths with magic sweets,
 Where many a thorn like thine, fair rose.
 Full oft the weary wanderer meets :
 And when he sees thy charms depart,
 He feels thy thorn within his heart."

MRS. M. ROBINSON.

THE rose, which is the emblem of beauty and the pride of Flora, reigns queen of the flowers in every part of the globe ; and the bards of all nations and languages have sung its praises. Yet what poet has been able, or

language sufficient, to do justice to a plant that has been denominated the daughter of heaven, the glory of the spring, and the ornament of the earth?

As it is the most common of all that compose the garland of Flora, so is it the most delightful. Every country boasts of it, and every beholder admires it; poets have celebrated its charms without exhausting its eulogium, for its allurements increase upon a familiarity, and every fresh view presents new beauties, and gives additional delight. Hence it renovates the imagination of the bard, and the very name of the flower gives harmony to his numbers, as its odours give sweetness to the air.

To paint this universal emblem of delicate splendor in its own hues, the pencil should be dipped in the tints of Aurora, when arising amidst her aerial glory. Human art can neither colour nor describe so fair a flower. Venus herself feels a rival in the rose, whose beauty is composed of all that is exquisite and graceful.

It has been made the symbol of sentiments as opposite as various. Piety seized it to decorate the temples, whilst Love expressed its tenderness by wreaths, and Jollity revelled adorned with crowns of roses. Grief strews

it on the tomb, and Luxury spreads it on the couch. It is mingled with our tears, and spread in our gayest walks; in epitaphs it expresses youthful modesty and chastity, whilst in the songs of the Bacchanalians their god is compared to this flower. The beauty of the morning is allegorically represented by this flower, and Aurora is depicted strewing roses before the chariot of Phœbus.

“ When morning paints the orient skies,
Her fingers burn with roseate dyes.”

It is thought to have given name to the Holy Land where Solomon sang its praise, as Syria appears to be derived from *Suri*, a beautiful and delicate species of rose, for which that country has always been famous; and hence called *Suristan* (the Land of Roses).*

“ Each common bush shall Syrian roses wear.”

VIRGIL.

“ Now, upon Syria's land of roses
Softly the light of eve reposes.”

T. MOORE.

Forster says, “ the rose of Kashmire for its brilliancy and delicacy of odour has long been proverbial in the East.”

* Richardson.

“ Who has not heard of the vale of Cashmere,
With its roses the brightest that earth ever gave.”

T. MOORE.

The oriental poetry abounds in flowery allusions to this plant.

“ You may place a hundred handfuls of fragrant herbs and flowers before the nightingale, yet he wishes not, in his constant heart, for more than the sweet breath of his beloved rose.”*

“ Oh ! sooner shall the rose of May
Mistake her own sweet nightingale,
And to some meaner minstrel’s lay
Open her bosom’s glowing veil.”

T. MOORE.

The Ghebers say, that when Abraham, their great prophet, was thrown into the fire by order of Nimrod, the flame turned instantly into “ a bed of roses, where the child sweetly reposed.” †

According to the Indian mythology, Pagoda Siri, one of the wives of Wistnou, was found in a rose.

The island of Rhodes owes its name to the prodigious quantity of roses with which it abounds.

Ludovico Verthema, who travelled into the East in the year 1503. observes, that Taessa

* Jami.

† Tavernier.

was particularly celebrated for roses, and that he saw a great quantity of these flowers at Calicut, both red, white, and yellow; and Sir William Ouseley tells us, in his work on Persia, that when he entered the flower-garden belonging to the governor of a castle near Fassa, he was overwhelmed with roses. In Persia, wine and other liquors are brought to table with a rose in the bottle instead of a stopple or cork.

Jackson says, that the roses of the *Jinan Nile*, or garden of the Nile (attached to the Emperor of Morocco's palace), are unequalled, and that mattresses are made of their petals for the men of rank to recline upon; and we read in Father Catrou's "*Histoire du Mogol*," that the celebrated Princess Nourmahal caused an entire canal to be filled with rose-water, upon which she took her pleasure with the Great Mogul.

The heat of the sun disengaging the water from the essential oil of the rose, this substance was remarked floating on the surface of the canal; and it was thus that the essence or *otto* of roses was first discovered.

A perfumer in Paris, who made otto of roses for the court of Louis the Sixteenth, says, it required four thousand pounds weight

of rose leaves to produce seventeen ounces of the oil:

Of the birth of the rose, it is related in fable, that Flora having found the corpse of a favourite nymph, whose beauty of person was only surpassed by the purity of her heart and chastity of mind, resolved to raise a plant from the precious remains of this daughter of the Dryads, for which purpose she begged the assistance of Venus and the Graces, as well as of all the deities that preside over gardens, to assist in the transformation of the nymph into a flower, that was to be by them proclaimed queen of all the vegetable beauties. The ceremony was attended by the zephyrs, who cleared the atmosphere, in order that Apollo might bless the new-created progeny by his beams. Bacchus supplied rivers of nectar to nourish it, and Vertumnus poured his choicest perfumes over the plant. When the metamorphosis was complete, Pomona strewed her fruit over the young branches, which were then crowned by Flora with a diadem, that had been purposely prepared by the celestials to distinguish this queen of flowers.

Anacreon's birth of the rose stands thus translated by Moore.

“ Oh! whence could such a plant have sprung?
 Attend — for thus the tale is sung:
 When, humid from the silvery stream,
 Venus appear'd, in flushing hues,
 Mellow'd by Ocean's briny dews —
 When, in the starry courts above,
 The pregnant brain of mighty Jove
 Disclosed the nymph of azure glance —
 The nymph who shakes the martial lance!
 Then, then, in strange eventful hour,
 The earth produced an infant flower,
 Which sprung, with blushing tinctures drest,
 And wanton'd o'er its parent's breast.
 The gods beheld this brilliant birth,
 And hail'd the rose — the boon of earth!
 With nectar drops, a ruby tide,
 The sweetly-orient buds they dyed,
 And bade them bloom, the flowers divine
 Of him who sheds the teeming vine:
 And bade them, on the spangled thorn
 Expand their bosoms to the morn.” *Ode 55.*

Fabulous authors also account for the delicious perfume of the rose, by telling us that Love, in a feast of Olympus, in the midst of the gaiety of a light and lively dance, overthrew, with a stroke of his wing, a cup of nectar, which precious liquor falling on the rose, embalmed it with that heavenly fragrance which it still retains.

The rose is said to have been originally white, and its change of colour is thus elegantly accounted for by the luxuriant imagination of Catullus.

“ While the enamour’d queen of joy
 Flies to protect her lovely boy,
 On whom the jealous war-god rushes;
 She treads upon a thorned rose,
 And while the wound with crimson flows,
 The snowy floweret feels her blood, and blushes !”

Mythological writers also relate that Rhodante, queen of Corinth, to avoid the pursuit of her lovers, fled into the temple of Diana to conceal herself; but being besieged by lovers, and obliged to appear, she called on the people for assistance, who, on beholding her beauty, threw down the statue of Diana, and declared her to be the goddess of the temple; upon which Apollo changed her into a rose.

The first rose ever seen was said to have been given by the god of love to Harpocrates, the god of silence, to engage him not to divulge the amours of his mother Venus; and from hence the ancients made it a symbol of silence, and it became a custom to place a rose above their heads in their banqueting rooms, in order to banish restraint, as nothing there said would be repeated elsewhere; and from this practice originated the saying, “Under the rose,” when any thing was to be kept secret.

The Turks are great admirers of this lovely flower, and Mussulmen in general believe, *that it first sprang from the perspiration of*

Mahomet, on which account they will not suffer a rose leaf to lie upon the ground, or permit any one to tread upon this sacred flower.

The Greeks named this flower *Ῥόδον*, which, according to some etymologists, is derived from the two words ῥέον and ὀδμή, on account of the sweet odour which it exhales. Ὀδμή being derived from the verb ὀζω, it is probable that the Latins derived their name for the rose, *Rosa*, from the Greek *s* being restored for the *zeta* instead of *delta*, and all the modern languages have followed the Latin with but slight deviations.

In the luxurious days of the ancients, even the warriors crowned themselves with garlands of roses, during their principal repast; and Pliny tells us that their delicate meats were either covered with the petals of these fragrant flowers, or sprinkled with its odorous oils. At a feast which Cleopatra gave to Antony, the royal apartments were covered with rose leaves to a considerable depth.

The triumvir, when dying, begged of the captivating queen that she would scatter perfumes on his tomb and cover it with roses.

In Turkey a rose is sculptured on the monument of all ladies that die unmarried; and in Poland they cover the coffins of chil-

“Roses, en qui je vois paroître
 Un éclat si vif et si doux,
 Vous mourrez bientôt ; mais peut-être
 Dois-je mourir plutôt que vous !
 La mort, que mon âme redoute,
 Peut m’arriver incessamment.
 Vous mourrez en un jour, sans doute,
 Et moi peut-être en un moment !”

At this instant we found a funeral procession slowly winding towards us, amid the monumental stones, and avenues of trees, to avoid which, we ascended the height, where our attention was attracted by a grave covered with fresh moss, and thickly strewed with the most odorous white flowers, such as the orange-blossom, jasmine, myrtle, and white rose. At each corner stood white porcelain vases, filled with similar flowers, all of pure white ; the whole was covered with a fence of wire-work ; and the monument was without a name, and had only this simple and pathetic inscription, “ Fille chérie — avec toi mes beaux jours sont passés ! 5. Juin, 1819.”

We were told that the afflicted parent still continued to indulge in the sad duty of replenishing the grave with fresh flowers, at the earliest opening of the gates of this melancholy garden of graves.

The most trivial objects will sometimes make impressions on the mind, even against

our reason, and it is with difficulty we avoid sensations of affliction, when we now look upon bouquets of colourless flowers, whereas others equally enliven us; but these, too forcibly remind us of the elegant child with whom we can no more tread the consecrated ground of Père la Chaise.

. The Mexicans, says the Abbé Clavigero, have from time immemorial studied the cultivation of flowers and odorous plants, which they employ in the worship of their gods; and in the temple of the true God the high priest was formerly crowned with roses. The Catholic church has still preserved the use of these flowers in its most sacred ceremonies, as it is always the rose that they strew before the holy sacrament in solemn processions.

There is now to be seen at Rome, in the church of Saint Susan, an old Mosaic, which represents Charlemagne kneeling, receiving of St. Peter a standard covered with roses. The custom of blessing the rose is still preserved at Rome, and the day is called *Dominica in rosâ*. They make in that city artificial rose-trees of pure gold, which are blessed by the Pope on the first Sunday in Lent, while they sing *Lætare Jerusalema*,

and which after mass he carries in procession ; and then sends to sovereigns or presents to princes who visit his capital : and it was the custom until about these last forty years, for the prince who received this rose-tree to give a sum equal to five-hundred pounds to the person who brought him this present from the Pope ; but the rose-tree by its weight alone was worth twice this sum.

Pope Julius the Second sent a consecrated rose of gold, dipped in chrism, and perfumed "with musk, to Archbishop Warham, April 5. 1510, to be presented to Henry the Eighth, at high mass, with the apostolical benediction. The king received the precious rose, and more precious benediction, with profound reverence and excessive joy. But every body knows how soon the remembrance of this rose faded with this capricious monarch.

Mary Stuart, Queen of Scots, sent a magnificent silver rose-tree to Ronsard, the French poet, of the sixteenth century, which was valued at two thousand crowns, with this inscription : *Ronsard, l'Apollon de la Source des Muses*. As a specimen of his verse we give his ode on the rose.

" Mignonne, allons voir si la rose,
Qui ce matin avoit déclose

Sa robe de pourpre au soleil,
 N'a point perdu cette vesprée,
 Les plis de sa robe pourprée
 Et son teint au vôtre pareil.
 Las ! voyez comme un peu d'espace,
 Mignonne, elle a, dessus la place,
 Las ! las ! ses beautés laissé choir !
 Oh ! vraiment, marâtre nature,
 Puisqu' une telle fleur ne dure
 Que du matin jusques au soir,
 Donc si vous me croyez, mignonne,
 Tandis que votre âge fleuronne
 En sa plus verte nouveauté,
 Cueillez, cueillez votre jeunesse ;
 Comme à cette fleur la vieillesse
 Fera ternir votre beauté."

Bayle relates an accident which happened at the baptism of Ronsard. In those days it was customary to bring large vases full of rose-water, and baskets of flowers to christenings ; and as the nurse was going to church with the infant bard she let her flowers fall, and in turning to recover them, she touched the attendant who carried the vase of rose-water, and spilt it on the child ; and this, says Bayle, was since regarded as a happy

* This idea recalls to recollection the lines of Waller :

Song to a Rose.

" Tell her that's young
 And shuns to have her graces spy'd,
 That hadst thou sprung
 In deserts where no men abide,
 Thou must have uncommended died."

presage of the good odour that would some day scatter his poetry.

Painters represent Saint Dorothy holding a nosegay of roses, because it is told in her life that an angel gave her a bunch of roses ; and a prodigy is related of Saint Louis, a bishop, who was nephew to Louis the Ninth of France. It is pretended that a rose was seen to come out of his mouth after his death.

In the abbey of Saint Croix, at Poitiers, they show a pillar that was raised to commemorate a pretended miracle, and where they tell you a rose-tree in full blossom sprung out of the grave of a young man, on the day after his interment. It is truly shocking that the teachers of Christianity should countenance such absurd superstitions. We could enumerate many others coupled with the rose ; but we are more anxious to give space for an account of the agreeable use to which this flower was put by Saint Médard, who about the year 530, instituted the most affecting prize that piety has ever offered to virtue. It was a crown of roses for that villager's daughter, who was the most modest, most obedient to her parents, and the most discreet. The first rose-tree was his own

sister, whom he crowned in the church of Salency.

We cannot pass over unnoticed the well-known story of the rose-leaf, which shows how fond the eastern nations were of conveying their thoughts by hieroglyphics.

At Amadan there was a famous academy, the rules of which were, that the members of it should think much, write little, and speak as seldom as possible. Zeb, a learned doctor, celebrated all over the East for his great knowledge, hearing of a vacancy in this institution, hastened to the city in order to be elected. Unfortunately he arrived too late, for the place had already been filled by a candidate, who, like many in these times, owed his success to his power more than to his deserts. The president of the academy filled a vase so full of water that an additional drop would make it run over, by which the doctor was to understand that their society was too full to admit of another member.

The learned Zeb was retiring sorrowfully, when by chance he perceived a petal of a rose at his feet, which he seized with promptness, and placed it so delicately on the top of the water, that it did not disturb the liquid in the least. This ingenious allusion was received by the assembly with the greatest

approbation, and the academicians testified by their unanimous applause, their consent to the reception of the illustrious Zeb as a member of their society.

Ofiana, when confined a prisoner in a lofty tower, threw a wet rose to her lover to express her grief and love ; and in the floral language of the East, the presenting a rose-bud with thorns and leaves, is understood to express both fear and hope ; and when returned, reversed, it signifies that you must neither entertain fear or hope. If the thorns be taken off before it is returned, then it expresses that you have every thing to hope ; but if the leaves be stripped off, it gives the receiver to understand that he has every thing to fear: The pronoun *I* is understood by inclining the flower to the right, and the pronoun *thou* by inclining it to the left.

The poet Bonnefons sent to the object of his love a nosegay consisting of a white and a red rose, the one to indicate the paleness of his complexion, caused by anxiety, and the other by its carnation tint, was to express the flames of his heart. The bouquet was accompanied by this verse :

“ Pour toi, Daphné, ces fleurs viennent d’éclore,
Vois, l’une est blanche, et l’autre se colore
D’un vif éclat : l’une peint ma pâleur,
L’autre mes feux : toutes deux mon malheur.”

Thus the flower which Philostratus dedicated to Cupid is made to speak the language of love. We are told that some persons have passed through life without feeling the arrows of the young god; and we read of others who could not endure the sight or smell of roses. Mary de Medicis, it is said, detested roses even in paintings, and the Knight of Guise fainted at the sight of a rose. These strange aversions are unnatural, and the objects deserve our pity.

Man alone seems born sensible to the delight of perfumes, and employs them to give energy to his passions, for animals and insects in general shun them. The beetle is said to have such an antipathy to roses, that the odour of this flower will cause its death; from which the ancients devised the allegory, to describe a man enervated by luxury, by representing him under the image of a beetle expiring surrounded by roses.

Madame de Genlis tells us that formerly the rose was considered so precious in France that in several parts of that country the inhabitants were not allowed to cultivate it, as if all but the powerful were unworthy of such a gift; and at other times we find it mentioned among the ancient rights of manors, to levy a tax or tribute of so many bushels of

roses, for the provision of rose-water for their lord, whose table was also covered with rose-leaves instead of napkins. The French parliament had formerly a great day of ceremony, called *baillée de roses*, because great quantities of roses were then distributed.

We presume that it was formerly more customary to use rose-water in this country than at present, as we find amongst the charges in the account of a dinner of Lord Leiyster, Chancellor of the University of Oxford, Sept. 5. 1570: “For iij oz. of rose-watere, for boylde meats, and leaches, and gelleys, and drie leches, and marche payne, and to wash afore dinnere, and after dinnere. iij s. ix d.”

Rose-water is still in such demand in Damascus, for the purposes of cookery, that many hogsheads of it are sold daily in the markets of that city.

As we now possess upwards of eight hundred different kinds of roses, it would be in vain to attempt the description of all the varieties and sub-varieties, which nothing short of the most minute inspection can discover, and the nicest pencil pourtray. To such of our readers as may wish to see the roses pictured, we recommend them to inspect the work which Miss Lawrence has published

in this country, and *Les Roses, par Redouté*, published at Paris, in three folio volumes.

Of the roses which are natives of these islands, the British Botanist of 1820 notices twenty belonging to England, four to Scotland, one to Ireland, and one to the Scilly islands. These are made to form seven distinct species in the Hortus Kewensis, the most delightful of which is the sweet-brier, or eglantine, *rosa rubiginosa* or *eglanteria*.

“ By sweet-brier hedges, bath'd in dew,
Let me my wholesome path pursue.” WARTON.

“ Come, gentle air ! and while the thickets bloom,
Convey the jasmin's breath divine,
Convey the woodbine's rich perfume,
Nor spare the sweet-leaved eglantine.” SIENSTONE.

It is noticed by Chaucer, as long back as the middle of the fourteenth century,—

———“ The grene herber
With sycamore was set, and eglatere.”

This species of rose is found in chalky or gravelly soil, on heaths, or hedges, in most parts of Europe ; but the size and fragrance of the leaf is greatly improved by cultivation, that has also produced six varieties of this fragrant-leaved brier, the most beautiful of which are the double-flowered and

the double moss brier. It is hardly possible to scatter this shrub too thickly in the plantation, and when we pass hedges of this odorous thorny plant, after a spring shower, we feel not only delighted but refreshed by the fragrance.

The name of Eglantine, by which the sweet-leaved brier is known, is taken from the French *eglantier*. That we so often find French names given to our native plants is not singular, as after the Conquest, French became the written language of this country for many centuries. The Greeks called all the wild roses or briars *Κυνόροdon*, because the root was thought to cure the bite of a mad dog; and the Latins, for the same reason, named them *Canina*, and from them we call one of our hedge briars the Dog-rose.

It is the dog-rose, *rosa canina*, that decorates our hedgerows with its tall arching branches and lively odorous flowers in the months of June and July. From the petals of this blush-coloured wild rose, a perfumed water may be distilled, which is thought to be more fragrant than that from garden roses. The leaves of this brier, when dried and infused in boiling water, are often used as a substitute for tea, and have a grateful smell and sub-astringent taste.

The fruit of this brier also forms one of the

greatest beauties amongst the autumnal tints, being of a bright scarlet, perfectly smooth and glossy, and of an elegant oblong shape. This brier is often called the Hip-tree, from the name of the fruit.

“ Still hungering, penniless, and far from home,
I fed on scarlet hips and stony haws.

* * * * *

Hard fare ! but such as boyish appetite
Disdains not.”

COWPER.

Many persons eat this fruit with pleasure when mellowed by the frost. It was formerly much used as a conserve, the seeds being taken out, and the pulp beaten up with sugar. Gerard says, “ The fruit, when it is ripe, maketh most pleasant meates and banquetting dishes, as tartes, and such like.” The fruit of the rose is nothing more than a fleshy urceolate calyx, from whence the stigma springs, and it afterwards becomes the repository of the true fruit or seed, after the manner of the fig, excepting that the seeds of the hip are divided by silky bristles, or prickly fibres, which cause great irritation on the primæ viæ, if eaten.

It is the strong shoots of this species of rose-tree that the largest kinds of garden roses are now grafted on; and by this means we see, instead of bushes, tall stems throwing out a

head in imitation of the forest trees. Where it is desirable to raise them to a height above dwarf bushes, it has a good effect; as also when planted in flower gardens, as pinks and other flowers, may cover the ground with blossoms, whilst the rose forms a kind of parasol over them; but in general we prefer a rose-bush to a tree of roses, and are better pleased to look into a rose than up to it. Delille notices this modern practice with that of keeping apple-trees in a dwarf state.

“ Of old, the rose on lowly bramble sprung,
While high in air the ruddy apple hung!
Now, strange reverse! the rose-tree climbs the skies,
While scarce from earth our apple-trees arise.”

The white field rose, *rosa arvensis*, is commonly called the White Dog-rose. This is much less fragrant than the last-mentioned. As the fruit of this kind ripens, it changes from an oblong into a globose shape. The styles of the flower, as soon as they have passed through the neck of the calyx, are compacted into a cylinder, resembling a single style, terminated by a knob composed of the stigmas, which distinguish it from the other species. It is said to be the most common rose in the west of Yorkshire, and it is generally mentioned as the rebel rose.

-A young English lady appearing in com-

pany at Paris with a sprig of orange flowers in her bosom, was thus complimented by a Frenchman for the clearness of her complexion, at the same time that he gave her a delicate hint that her bosom was more exposed than modesty allowed.

“ Lovely Tory, why the jest,
Of wearing orange in thy breast?
Since this breast so clearly shows
The whiteness of the rebel rose.”

That both the white and the red rose were formerly considered rebellious emblems, the blood of our ancestors has fully proved.

“ And here I prophesy. — This brawl to-day
Grown to this faction, in the Temple Garden,
Shall send, between the red rose and the white,
A thousand souls to death and deadly night.”

SHAKSPEARE.

The idea of taking a red or a white rose, as an ensign for the parties who caused such dreadful devastation in this country for many ages, seems to have originated in the Temple Gardens of London, if we may trust to poetical history, that says in King Henry the Sixth,

“ Within the Temple Hall we were too loud;
The garden here is more convenient.”

In this scene Richard Plantagenet, Duke of York, is made to say,

“ Since you are tongue-ty’d, and so loath to speak;
 In dumb significants proclaim your thoughts;
 Let him, that is a true born gentleman,
 And stands upon the honour of his birth,
 If he supposes that I have pleaded truth,
 From off this briar, pluck a white rose with me.”

To which Somerset answers,

“ Let him that is no coward, nor no flatterer,
 But dare maintain the party of the truth,
 Pluck a red rose from off this thorn with me.
Warwick. I love no colours, and, without all colour
 Of base insinuating flattery,
 I pluck this white rose, with Plantagenet.
Suffolk. I pluck this red rose with young Somerset,
 And say withal, I think he held the right.
Vernon. Stay, lords, and gentlemen; and pluck no more
 Till you conclude — that he, upon whose side
 The fewest roses are crop’d from the tree,
 Shall yield the other in the right opinion.”

This being settled, Vernon says,

“ Then, for the truth and plainness of the case,
 I pluck this pale and maiden blossom here,
 Giving my verdict on the white rose side.
Som. Prick not your fingers as you pluck it off;
 Lest, bleeding, you do pain the white rose red,
 And fall on my side so against your will.
Plan. Now, Somerset, where is your argument?
Som. Here, in my scabbard; meditating that,
 Shall die your white rose in a bloody red.
Plan. Now, by this maiden blossom in my hand,
 I scorn thee and thy fashion, peevish boy.”

From that time 1454, until the families
 were united in 1485, civil war laid waste the
 fairest portions of our country, and the sons

of one father often engaged in battle, and sometimes the father against the son, under the different banners of the red or the white rose.

“ O God ! is it my father’s face,
Whom in this conflict I unawares have kill’d
O heavy times, begetting such events !”

* * *

————— “ Is this our foeman’s face,
Ah, no, no, no, it is mine only son ! —
Ah, boy, if any life be left in thee,
Throw up thine eye ; see, see, what showers arise,
Blown with the windy tempest of my heart,
Upon thy wounds, that kill mine eye and heart. —
O, pity, God, this miserable age ! —
What stratagems, how fell, how butcherly,
Erroneous, mutinous, and unnatural,
This deadly quarrel daily doth beget ! —
O boy, thy father gave thee life too soon,
And hath bereft thee of thy life too late.”

In times of terror, fear and superstition are generally seen hand in hand. During these ages of domestic wars, we are told that they discovered a rose-tree at Longleat, which bore white flowers on one side and red ones on the other side, prognosticating both the division and uniting of the two families.

“ But oh ! how alter’d was the mournful tone,
When Harry Richmond, arm’d with title true,
His baldrick ’cross his shoulders flung,
And with enliv’ning trumpet, blew
A call to arms, that thro’ the island rang !
His claim announcing to the English throne.”

DIBDIN.

It was, as is pretended, upon the marriage of Henry the Seventh, to Elizabeth, the daughter of Edward the Fourth, that the rose first appeared with mixed petals of red and white, which is still acknowledged throughout Europe, as the emblem of that happy union, by the name of “York and Lancaster Rose.”

Having just met with some verses on the white rose, entitled the “Lament of the Year 1745,” we give them as being connected with the contending houses, and not as our party spirit, for we may safely say, as the Earl of Warwick did to John Beaufort, Duke of Somerset,

“Between two girls, which hath the merriest eye,
I have, perhaps, some shallow spirit of judgement,
But in these nice sharp quillets of the law,
Good faith, I am no wiser than a daw.”

“Oh, thou pale, snowy rosebud, though rent and laid low
By the rude hand of power in the day of despair,
Yet thou still in the breasts of the loyal shalt blow,
Full as lovely, as fragrant, as fresh, and as fair.
Though our bosoms no longer may glow with the dream
Of royalty righted, and exiles restored,
Yet still they may swell with the rapturous theme
Of the faith they long cherish'd, the prince they adored;
And still they in silence may weep o'er the woes,
Endured by the chieftains who bore the white rose.”

With that deep thrilling interest, where pleasure and pain
 Contend in the bosom and struggle for sway,
 We muse on the emblem of loyalty vain,
 And sigh o'er its fall on Culloden's dark day:
 Yet the cloud that o'ershadowed the dawning so bright,
 And obscured with its darkness the valley and heath,
 With the beam of the meteor flashed radiance and light,
 And illumed with its splendour the pale field of death,
 And bright o'er the fallen its lustre arose,
 And hallowed their sufferings, their valour and woes.

Oh, still whilst our bosoms shall glow with the flame,
 Which heaven itself in its mercy inspired,
 Shall awaken each thrill as it dwells on the fame
 Of the heroes so loyal, devoted, admired.
 And still the loved emblems of loyalty true,
 Shall honoured and blest in our bosoms remain,
 And whilst its white blossoms we pensively view,
 We behold no dishonour, or sully, or stain;
 And ages to come shall admiring disclose,
 The virtues and fame of the pure snowy rose."

New Monthly.

Gerard tells us, that the double white rose formerly grew wild in the hedges of Lancashire, in great abundance, as briars. This we presume was the white dog-rose, which had become double by some accidental circumstance, and that the variety propagated itself by suckers and layers, in a soil which was suitable for that purpose.

"The sweetest rose where all are roses."

The most delightful rose of which the garden boasts is the Provençe or provins rose,

rosa provincialis, and which has been claimed by the inhabitants of the south of France as a native of Provence, whilst the Dutch, says Gerard, consider themselves entitled to this flower, and say, as it first came out of Holland it ought to have been named the Holland rose, and not Provence rose; but it appears very evidently from Pliny, that neither of these countries can justly hold it as a native plant. He calls it a Greek rose, and thus describes it in the fourth chapter of his twenty-first book, "The rose named *Græcula* has its petals or flower leaves folded or lapped over each other so closely, that they will not open of themselves, unless they be forced with the fingers, and therefore always look as if they were in the bud, but when they are expanded they are the largest of all the roses." This account correctly corresponds with the nature of the Provence rose, which is often called the Cabbage rose, from the manner in which the petals cabbage, or fold over each other. As this rose is so nearly allied to the damask rose, it is probable that the Greeks first obtained it from the vicinity of Damascus, and that the trivial change is owing to soil and cultivation. At what period this beautiful flower first found its way into English gardens is uncertain. Gerard speaks of it as no

rarity in 1597. Hakluyt says, that the damask rose was brought in by Dr. Linaker, physician to King Henry the Seventh and his successor. But from the verses of Chaucer and other old poets, it appears that the garden roses were common in this country at a much earlier period, and we can hardly suppose that so many pilgrimages would be made to Rome and even to Jerusalem, without some one's bringing back plants of these flowers, that were then so commonly used in Christian churches, and so highly extolled for their medical virtues.

In those early days the principal gardens of this kingdom were attached to priories and other religious houses, and as the heads of these establishments had frequent communication with similar communities on the continent, we may safely conclude that so precious a gift as the rose would not pass neglected. From the luxurious manner in which the Romans lived in this country for many ages, and from their habit of wearing wreaths of roses at their banquets, it is more than probable that they introduced many kinds of their own roses into the gardens which they formed in this island. The principal varieties of the Provence rose are, the Common, Scarlet, Blush, White, Rose de Meaux,

Pompone, Rose de Rheims, Childing's, Blandford, Rose St. Francis, Shailer's; and the varieties of the Damask rose are, the Red, Blush, York and Lancaster, Red monthly, White monthly, Blush monthly, Great Royal, Blush Belgic, Red Belgic, Goliath, and Imperial blush, with many others that are yearly raised in various parts of the world by sowing the seeds.

THE MOSS ROSE. — *Muscosa*.

“ The rose that hails the morning,
 Array'd in all its sweets,
 Its mossy couch adorning,
 The sun enamour'd meets.”

THIS elegant rose is generally supposed to be the offspring of the Provence rose, whilst others think it belongs to the family of *centifolia*, or hundred-leaved rose. It appears to have been quite unknown to the ancients, as they have left no description of a flower that resembles it, and it is too singularly beautiful to have escaped Pliny's notice, had it then been in existence. By Furber's catalogue it appears that it was cultivated here in 1724; but Miller first saw it in Dr. Boerhaave's

garden in Leyden, in 1727. The learned Doctor not only corresponded with many botanical persons in this country, but visited England, and became a member of the Royal Society of London. It is therefore most likely that on its first appearance in this country, a plant would be forwarded to Leyden, for the inspection of a person that all Europe was then regarding as the star of the age.

Although the moss rose appears to be a plant of so short an existence, its birth-place is not satisfactorily known; but from all the accounts we can collect of its register, it appears to be a fortuitous child of England, as we have numerous accounts of its having been exported, but none of its importation into this island, nor has it been discovered elsewhere, excepting in a state of cultivation. Messrs. Lee and Kennedy, of Hammersmith, have within these last few years produced a perfectly single moss rose, which they pronounce to be only a variety of the common Provins rose. We must therefore conclude that the moss-like pubescence on the calyx and young branches, is owing to some accidental circumstance which this climate produces, as we are told that this variety loses its mossiness, almost immediately when

planted in Italy, and we have not yet heard of this rose having been in any instance raised from seed, for the single moss rose was reduced to that state from the double variety (either accidentally or intentionally) by a peculiar mode of cultivation. The single variety of the moss rose, as well as the double white moss rose, still continue scarce, and bring high prices to the nurserymen near London.

The moss rose is made the emblem of voluptuous love, and the creative imagination of the poet thus pleasingly accounts for this rose having clad itself in a mossy garment.

“ The angel of the flowers, one day,
 Beneath a rose-tree sleeping lay.
 That spirit — to whose charge is given
 To bathe young buds in dew from heaven.
 Awaking from his light repose,
 The angel whisper’d to the rose, —
 ‘ O fondest object of my care,
 Still fairest found where all are fair,
 For the sweet shade thou’st given to me,
 Ask what thou wilt, ’tis granted thee.’
 ‘ Then,’ said the rose, ‘ with deepened glow,
 ‘ On me another grace bestow.’
 The spirit paused in silent thought,
 What grace was there that flower had not?
 ’Twas but a moment — o’er the rose
 A veil of moss the angel throws.
 And, robed in nature’s simplest weed,
 Can there a flower that rose exceed?”

M. Redouté, the author of a French pictured work on roses, seems displeased at our

claiming the moss rose as originating in England: he says, " nous ferons observer qu'il n'est pas rare de voir les Iconographes Anglais considérer beaucoup de plantes comme indigènes au sol de leur pays, toutes les fois que le lieu dans lequel elles végètent naturellement leur est inconnu, circonstance qui doit faire rejeter toutes les assertions de ce genre."

Madame de Genlis tells us, that during her first visit to England, she saw moss roses for the first time, and that she took to Paris a moss rose-tree, which was the first that had been seen in that city; and she says, in 1810, " the cultivation of this superb flower is not yet known in France."

Madame de Latour endeavours to do away this statement. In a high strain of compliment, she says, " when Madame de Genlis returned from London to Paris, she was become very celebrated, and the crowds of people who went to her house under pretence of seeing the moss rose-tree, were attracted thither by that lady's celebrity; and the modesty of Madame de Genlis alone could have led her into this error; for this rose-tree," she adds, " which is originally from Provence, has been known to us for several ages."

M. Rossig, who has lately published a work on roses, with good coloured figures, says, that the moss rose is found on the Alps. But this information comes rather late, as it is improbable that a plant of such a size and singular beauty should have escaped the penetrating eyes of the various botanists who have herbalised so frequently on these mountains, as not to have left a species of grass or even moss unrecorded.

The moss rose is propagated by layers or suckers, which it sends up plentifully when growing in rich light garden mould, that is rather moist than over dry. When the branches are laid down they should be slightly bent so as to crack the bark, which will cause them to take root sooner. This beautiful rose is also increased by budding upon stocks of the other sorts, which is generally performed in the month of May; but these plants are not so durable as those raised by layers.

THE HUNDRED-LEAVED ROSE. — *Rosa*
Gentifolia.

THIS is the rose with which painters chuse to represent Love and Hymen. It is certainly a

fine flower, being very double and of a deep crimson colour; but the perfume is very weak, and the petals do not hang so loose and gracefully as in many other species; and it has, from the regularity of its petals, been compared to a rose made by a turner, and therefore called *Flos quasi tornatus*.

This species of rose, which has become the parent of a most numerous variety, is a native of the mountains lying between 41 and 42 degrees north latitude, if we may trust to the best ancient natural historians that ever wrote on plants. Pliny says, in book xxi. chap. 4. that the roses which grow about Campania, in Italy, and near Philippi, a city in Greece, are so double that they have a hundred leaves, and are therefore called *Centifolia*. “However,” says this author, “these soils do not bring forth these hundred-leaved roses naturally, for it is the mountain Pangæus near adjoining upon which they grow naturally, but when transplanted into the neighbourhood of Philippi they become finer flowers than when on their native mountain;” and he adds, that “these very double roses are not so sweet as others.” This author tells us, that Cæpio, who lived in the time of the emperor Tiberius, was of opinion, that the hundred-leaved rose had no grace in a gar-

land either for smell or beauty, and therefore should not be used in chaplets. Loureiro mentions it as a native of China; but Theophrastus and Pliny clearly prove it to be an European tree.

Aiton does not notice the native place of this rose; and it is also omitted in *Le Bon Jardinier* of Paris, down to the present time. The able compiler of the *Hortus Kewensis*, tells us, from Gerard, that it was cultivated in our gardens in 1596. This appears to be an error, as Gerard in the original edition only notices this rose from the writings of the ancients; Martyn has fallen into the same mistake, in his admirable edition of Miller.

We are not therefore able to discover at what time this rose was introduced, as it is not noticed by Parkinson, in his “*Garden of Pleasant Flowers*,” of 1629; nor does it appear in his “*Theatre of Plants*,” of 1640.

The principal varieties of this rose we give from the Kew catalogue, which are the Dutch Blush, Singleton's, Burgundy, Single Velvet, Double Velvet, Sultan, Stepney, Lisbon, Bishop, Cardinal, Blush Royal, Petit, Pluto, Monstrous, Fringe, Plicate, Two-coloured, and Shell.

THE CINNAMON OR MAY ROSE. — *Rosa*
Cinnamoma.

“ Ton frais bouton, d’une aimable couleur,
Du cinnamome exhale l’ambrosie :
Et Flore en toi, par une douce erreur,
Croit respirer les parfums de l’Asie.”

THIS agreeably perfumed rose, which opens its small blossoms in our gardens about the end of May, is a native of Nice in Italy, and has been common in our pleasure-grounds for many ages, as Gerard tells us, in 1597, that it was then cultivated in this country, both in its single and double state. This rose loves a dry soil and sunny situation, and deserves a more frequent place in the shrubbery than modern plantation allows it, as its flowers appear a month before the common roses, and the bush grows tall enough to fill a middle situation amongst shrubs, where its smooth plum-coloured branches have a good effect. It is a favourite with our fair, as it may be worn in the bosom longer than any other rose, without fading, whilst its diminutive size, and red colour, together with a pleasant perfume, adapt it well to fill the place of a jeweller’s broach.

THE MUSK ROSE.—*Rosa Moschata*.

“ And each inconstant breeze that blows,
Steals essence from the musky rose.”

THIS species of rose owes its name to the fine musky odour which its numerous white blossoms exhale during the autumnal months. It is a native of Barbary, and grows wild in the hedges and thickets in the kingdom of Tunis; and the Tunisians cultivate it also for the sake of a highly odorous essential oil, which they obtain from the petals by distillation.

This rose has been found growing naturally in Spain by Robert More, Esq., who sent seeds to this country. We presume it was first planted in Spain, when the Moors overran the coast of that country.

Hakluyt tells us, in 1582, that we first obtained the musk rose from Italy. It was cultivated commonly in the time of Gerard, and as it sends forth large umbel bunches of flowers at the end of each branch, in the months of September and October, it forms an agreeable companion to the common China rose, which blossoms also plentifully at that season.

The stalks of the musk rose are often too weak to support the large bunches of flowers that crown its branches. It therefore requires a support to keep them from the earth, unless it be planted with dwarf evergreens, that form a natural and beautiful prop to these delicate blossoms.

THE YELLOW ROSE. — *Lutea* and *Sulphurea*.

THE single yellow brier rose, *lutea*, is said to be a native of Germany, the south of France, and Italy; and the single orange-coloured rose, *bicolor*, is an Austrian rose.

That it was through these countries we first became acquainted with the yellow rose, there can be no hesitation in stating; but that they were originally brought from more eastern climates, seems equally certain, since no ancient author that we have consulted, mentions a yellow rose of any description; and, had it been a flower created by the art of grafting, as was formerly imagined, we should, ere this, have discovered the fact. Ludovico Verthema tells us, in 1503, that he saw great quantities of yellow roses at Calicut, from whence we have no doubt, both the sin-

gle and double varieties were brought into Europe by the Turks, as Parkinson tells us in a work which he dedicated to Henrietta, the queen of our unfortunate Charles the First, that the double yellow rose "was first procured to be brought into England, by Master Nicholas Lete, a worthy merchant of London, and a great lover of flowers, from Constantinople, which (as we hear) was first brought thither from Syria, but perished quickly both with him, and to all other to whom he imparted it: yet, afterwards it was sent to Master John de Franqueville, a merchant also of London, and a great lover of all-rare plants, as well as flowers, from which is sprung the greatest store, that is now flourishing in this kingdom."

The double yellow rose, *sulphurea*, was unknown to us in 1597; but the single yellow brier was then common, as we find by Gérard.

The single yellow rose, *lutea*, blossoms freely in most situations, excepting in the vicinity of London, or other confined spots.

The double yellow rose, where it blossoms freely, is one of the most elegant flowers that any country has produced, and had nature bestowed on it the perfume that makes the Provence rose so delightful, it would be pronounced the acme of Flora's skill.

The outer petals are of the most delicate golden yellow, whilst the inner ones are often of a tint approaching to copper colour, and so delicately thin and transparent, as even to surpass the carnation poppy in texture; and although the flower is exceedingly double, yet the petals hang with a looseness and elegance that scarcely can be conceived without beholding it. Van Os the elder has been the most happy amongst painters in giving that transparent and crumpled effect to this rose, which Van Huysum himself could never so perfectly accomplish. Sydenham Edwards has left a faithful representation of the double yellow rose, which is given in the 46th page of the Botanical Register.

We remember this species of rose much more common than at present, growing in open situations, and we have generally observed that it has prospered best in an eastern aspect, where buildings or shrubs have sheltered it from the midday sun. It loves a light soil, of a gravelly or sandy nature, but cannot endure confined or wet situations. We have seen it in great perfection in a garden at Petersfield, in Hampshire; and it prospers and flowers freely in some parts of the South Downs, particularly at Findon, in Sussex. It seems much less affected by the

cold than by low and damp situations ; and we do not recollect having met with it in flower except in spots open to the east, which generally is considered the most pernicious to plants. The foliage of the double yellow rose is small, and of a beautiful bluish green, very light on the under side, whilst the stalks being of a delicate yellow-green, form a delightful graduation to the golden flower.

THE EVER-BLOWING CHINA ROSE. —

Semperflorens.

WHEN this species of rose was first introduced, in 1789, it was considered to be so delicate a plant, that it was kept constantly in the stove, and the smallest cuttings were sold for many guineas each. It was soon found to thrive in a common green-house, where it blossomed the whole winter, to the great admiration and no small amazement of all who could obtain sight of this far-fetched flower. As it was found to be of so easy a propagation, in a few years every country casement had the pride of sheltering this Chinese prodigy, until the cottager, for want of pence to purchase flower-pots, planted it in the open ground ; when,

as if it gloried to breathe in the air of this land of liberty, it soon surpassed in strength and beauty all the inmates of the “gardens, in which art supplies the fervour and the force of Indian skies.”

We have no plant upon record, either of utility or beauty, that has spread itself so rapidly over the whole country as this rose has done in our own age. It now climbs up to look into the attic windows of the very houses where we once saw it peep out of the lower casement; and it is not uncommon to see its petals blush through a veil of snow in the month of December; a thing so unusual formerly, that no longer back than the year 1800, Mrs. Mary Robinson wrote the following verses on seeing a rose in flower at a cottage door on Egham-hill, on the 25th of October of that year.

“ Why dost thou linger still, sweet flower ?

Why yet remain, thy leaves to flaunt ?

This is for thee no fostering hour —

The cold wind blows,

And many a chilling, ruthless shower,

Will now assail thee, beauteous rose !”

Although it is acknowledged that few plants contribute more agreeably to ornament our shrubbery in the autumnal months than this Chinese rose, yet we would not

wish it to exclude or lessen the cultivation of the older and more beautiful species, but which, we fear, it has already done to a considerable degree. As the smallest cuttings of this rose will grow, we are not without the hope of seeing it creep into our hedgerows, where it would soon propagate itself both by suckers and seed; for it ripens its fruit in this climate, as perfectly as those of our native briars, and the hips of the Chinese rose are particularly ornamental, from their inverted pear shape, fine orange colour, and large size. The deep-red China rose was first introduced by Gilbert Slater, Esq. of Knots-green, near Laytonstone, in the year 1789; but this is still confined to the greenhouse, being of a much more delicate nature than the common China rose. The flowers are semi-double, and large in proportion to the plant, of a fine dark carmine colour, and of a delightful fragrance:

The China rose, which has been named Lady Banks's Rose, *rosa Banksiæ*, we hope to see soon hardy enough to leave the greenhouse, where it has occupied a place since the year 1807. This is a double-white rose, of very diminutive size, but producing such abundance of blossoms, as to render the branches extremely elegant. We are in-

formed that it was discovered growing out of an old wall in China.

In pleasure-grounds it is scarcely possible to plant too many rose-trees, and they have the best effect when three or four plants of the same kind stand together. The Scotch or burnet-leaved rose, from its dwarf growth, forms a good foreground to other roses; and the neat little *Rose de Meaux* should advance towards the walks, whilst the more towering kinds may mix with shrubs of the middle class.

Where the lawn is interspersed with little clumps, fenced with basket-work, each clump or basket should be confined to one species of rose, or kinds that are quite opposite in colour; and as it is particularly desirable to keep these clumps successively in blossom during the season, those clumps which blossom the earliest and the latest should be divided by others that flower in the intermediate space.

Rosaries are formed in various devices; but the most common method is by planting the tallest standard rose-trees in the centre of a clump, around which the different species and varieties are placed according to their height of growth, the edge finishing by the dwarf kinds.

Rock work is sometimes covered with

creeping roses, and surrounded with other varieties.

For covering arbours or trellis-work, the bracted rose, *Rosa bracteata*, commonly called Sir George Staunton's rose, which was brought from China in the year 1795, is the most proper, as it grows to a great height, and thick of branches that are covered with shining leaves of a very fine green. The flowers are single and perfectly white, of a strong and agreeable perfume: it blossoms in August and September.

The modes of retarding the flowering of the Provence and moss-roses, until the autumn are various; and as it is desirable to continue these beauties of the garden longer than they are naturally disposed to last, we shall mention the best means of obtaining this enjoyment. The most simple method is by cutting off all the tops of the shoots that have been produced the same spring, which should be done just before they begin to show their buds; this will cause them to make fresh shoots, that will produce flowers late in the autumn. It may also be done by transplanting the bushes in the spring, just as they have formed their buds, which should be cut off, but the roots must not be out of the earth long enough to become dry, and they gene-

rally require watering when transplanted late, to obtain roses in October and November. On the continent, where much more pains are bestowed on the retarding of flowers than in this country, the rose-trees are dug up just as they begin to shew a leaf-bud, and the roots are instantly placed in a kind of mortar, formed of brick earth, which serves as a preservative plaster, whilst it debars the fibres of the roots from obtaining the necessary nutriment that would cause the usual growth of the plant. From this state of rest, the plants are removed into the clumps or flower borders in May or June, according to the time they are wished to be in blossom. When the season is dry, they will require frequent watering to ensure fine flowers. These plants should be kept in a cellar or a shed, where there is but little light.

The common Provence and moss-roses are the most esteemed for forcing, on account of their perfume.

— “ This soft family, to cares unknown,
 Were born for pleasure and delight alone.
 Gay without toil, and lovely without art,
 They spring to cheer the sense and glad the heart.”
 MRS. BARBAULD.

Yet this sweet emblem of love, like the

human body breeds a canker in its bosom,
that often destroys its heart.

——— “She never told her love,
But let concealment, like a worm i'the bud,
Prey on her damask cheek.” SHAKESPEARE.

——— “Death's subtle seed within,
(Sly, treacherous miner !) working in the dark,
* * * * *

The worm to riot on that rose so red,
Unfaded, ere it fell ; one moment's prey !”
YOUNG.

The principal enemy of the rose is a species of fly, called the rose Saw-fly, *Tenthredo rosea*, which pierces the tender flower-bud, and thrusts an egg into the puncture, which soon becomes a caterpillar, that nourishes itself by eating away the heart of the young flower and fruit down to where it joins the stalk. It then loses its supply of nourishment, droops to one side and dies, whilst the insect spins itself a descending rope, by which it reaches the ground, and there entombs its body in a silken shroud, whilst its transformation takes place first into a chrysalis, and then a fly, which renews this work of devastation. There are several flies of this genus, that are all equally injurious to the rose-tree. These flies are furnished with a very remarkable instrument, in the shape of a saw, by which they make small holes in the

bark of the young branches, where they deposit their numerous eggs, which on the succeeding summer are hatched by the warmth of the sun, and nourished by the ascending sap, until they assume the appearance of small green flies, in which state they issue from the bark in such numbers as to cover the tender shoots and leaves, on which they rest, to suck the nutriment of the plant. These flies may be known by a yellow body and black head, with four wings edged with black, and yellow legs spotted with black. Another species of rose-fly has a head and breast of violet colour, with a body of yellow, and legs and wings of pale violet. It may be seen in a summer's morning working on the branches of the rose-tree, and from its sluggish nature will suffer itself to be taken between the fingers. The branches where it has deposited its eggs are so vitiated by it, that they are easily discovered, as they generally swell to a greater size than the parts above or below, and they often become black on the under side: when examined with a glass, the eggs may be discovered. These branches should be carefully cut off; and when the plants are covered with these insects, it is desirable to brush them off with a bunch of feathers or young elder branches, as

they fix themselves too fast to be washed off by water.

Insects may be destroyed by placing a chafing dish, with lighted charcoal under the bushes, and then throwing a little brimstone on the coals; but this must be done in small quantities, and carefully, lest the sulphur injure the plants.

The lady-bird, *coccinella punctata*, so named from the points or specks on its shell wings, hunts rose bushes to feed on the small insects vulgarly called blights.

The brier and Scotch roses are frequently attacked by the *Cynips rosæ*, which, by puncturing the bark, occasions the production of those singular and beautiful flossy tufts, which are so frequently seen on wild roses. These rose galls contain several little cavities, in each of which is a small maggot. This substance was formerly used in medicine, under the name of *Bedeguar*.

The rose is too important a flower to have been overlooked by Æsculapius, who in old times used every part of this plant, from the root to the yellow anthers within the blossom, for some particular purpose in medicine, as may be seen in the works of all the ancient medical authors. The kinds of roses principally used in modern practice, are the red and

the damask. The latter is considered a safe and gentle purgative for children, when administered in infusion or by way of syrup.

The red roses are astringent, and particularly so when taken before they are fully blown; conserves are made of both these kinds of roses.

Ladies may make their own milk of roses, by simply adding one ounce of the oil of almonds to a pint of rose water, after which ten drops of the oil of tartar is to be added.

We shall conclude our history of the rose with the line of the Ayrshire Ploughman.

“ Never may'st thou, lovely flower,
 Chilly shrink in sleety how'r !
 Never Boreas hoary path,
 Never Eurus' pois'nous breath,
 Never baleful stellar lights,
 Taint thee with untimely blights !
 Never, never, reptile thief,
 Riot on thy virgin leaf !
 Nor even Sol too fiercely view
 Thy bosom blushing still with dew !

May'st thou long, sweet crimson gem,
 Richly deck thy native stem ;
 Till some ev'ning, sober, calm,
 Dropping dews, and breathing balm,
 While all around the woodland rings,
 And ev'ry bird thy requiem sings ;
 Thou, amid the dirgeful sound,
 Shed thy dying honours round,
 And resign to parent earth
 The loveliest form she e'er gave birth.”

RHODODENDRON.—RHODODENDRON.

*Natural order, Bicornes; Rhododendra, Juss.
A genus of the Dicaëdria Monogynia class.*

“ O’er pine-clad hills, and dusky plains,
In silent state Rhodonia reigns,
And spreads, in beauty’s softest blooms,
Her purple glories through the glooms.” SHAW.

THE Greeks named this flowering shrub Ροδοδένδρον, *Rhododendron*, from ροδον, a rose, and δένδρον, a tree. It was also called in that language *Rhododaphne*, the rose laurel. Pliny observes, that this plant was not so happy as to have a name given it by the Latins, and it is somewhat remarkable, that it should retain to this day the original name throughout Europe.

The foliage of this shrub is a poison to horses, asses, mules, sheep, and goats, &c.; yet it was anciently esteemed one of the best counter-poisons to man, particularly against the venom of serpents.

Tournefort tells us that there is a kind of rhododendron about Trebizond, whose flowers

the bee feeds upon, and the honey thence obtained drives those mad that eat of it.

“ Ev’n as those bees of Trebizond, —

Which from the sunniest flowers that glad
With their pure smile the garden bound,
Draw venom forth that drives men mad !”

T. MOORE.

The upper segment of the flowers of this plant performs the office of nectary. It is grooved in the middle, and is so fertile in the formation of honey, that you may observe a sweet globule in almost every expanded flower. There are in this part spots of a dingy purple, that indicate poison, and so well were the Romans acquainted with the poisonous nature of this honey, that they would not receive the Pontic honey in tribute, but obliged the unfortunate inhabitants of that neighbourhood to pay them a double portion of wax in lieu of it.

Dr. Turner, who wrote on this plant about the year 1568, says, “ I have sene thys tre in diverse places of Italy, but I care not if it neuer com into England, seyng it in all poyntes is lyke a pharesey, that is beauteus without, and within a rauenus wolf and murderer.”

Notwithstanding this appalling character, the Pontic rhododendron found its way into

the British shrubbery in the year 1763, where it still continues to display its clusters of fine purple blossoms, during the months of May and June, to the delight of all the lovers of flowering shrubs. In the royal gardens at Kew there are groves of these plants, which, when in full flower, present a mass of purple beauties that are splendid beyond description.

The original birth-place of this shrub is thought to have been in the southern subalpine tracts of Caucasus, where it still abounds in wet places, particularly in beech and alder woods; but it is not now confined to the neighbourhood of the Black sea, as it has extended itself to many places of the Levant, and reached even to Gibraltar. A variety of this or a similar species of rhododendron is also distributed over a great part of Siberia, and has been observed through the deserts of Mogul Tartary, to China and Thibet. It grows very commonly in the pine forests; and in some parts in such profusion and so densely as to make whole tracts appear a sheet of purple in April and May. This species was introduced from Russia, by Mr. Thomas Bell, in 1800. The leaves of this species are sometimes used as a substitute for those of the tea-tree.*

* Bot. Reg.

Three beautiful species of this plant have been discovered growing within the same latitudes in America, where the rhododendron has been found to flourish in the old world.

Peter Collinson, Esq. had the honour to be the first who introduced the American rhododendron, *maximum*, in the year 1736. In the year 1786 Messrs. Fraser, nurserymen in Sloane-square, introduced the Carolina dotted rhododendron, *punctatum*; and about the year 1810, the same firm raised from seed the dotted-leaved rhododendron, which is a native of the mountains of Carolina. These American species have flowers of a fine pink colour or peach blossom, which form an agreeable variety with the rich violet tints of the former species.

That these plants are nearly allied to the genus azalea, is proved by the experiments of Mr. Herbert, of Spofforth, near Wetherby, who has succeeded in raising a new plant by scattering the pollen from the anthers of rhododendron, *maximum*, over the stigma of the common white glaucous-leaved azalea, from which seed has been raised, mule plants, which partake of the nature of both parents. It takes after the rhododendron in its coriaceous evergreen foliage, the number of its stamens, the redness and expansion of the

limb of the corolla; after the azalea in the blueness of the leaves, the tapering of these towards each end, in the cylindrical elongation and whiteness of the tube of the corolla, &c.

The rhododendrons change their foliage after the blossom is over, and the flower buds are formed of a considerable size in the autumn for the following summer.

We now reckon eleven distinct species of these plants, all of which require to be planted in bog earth, and not in situations too much exposed to the mid day or afternoon sun.

We have already noticed their proper place in the shrubbery in the introduction to this work. We shall add, that when they can be contrasted by the yellow Spanish broom, or other plants of a similar colour, it gives their blossoms an additional lustre.

Clumps of the flame-coloured azalea should shine near those of the purple rhododendron, for as they both flower at the same season the contrast is as rich as a purple robe wrought with gold. It requires the nicest judgment to intermix even those plants which contrast or harmonise the best.

“ Not chaos like together crush’d and bruis’d,
But, as the world, harmoniously confus’d,
Where order in variety we see,
And where, tho’ all things differ, all agree.”

POPE.

The rhododendron is propagated by layers and suckers, but it is more generally raised from its seed, which resembles small saw-dust. If the seed be covered deep with earth it will not vegetate, and it should be sown as soon as possible after it is ripe, either in a shady border, or in pots filled with fresh loam, and very lightly covered with fine earth. The pots are then to be plunged into the earth in a shady border, and covered with hand-glasses in hard frost; but they should be constantly uncovered in mild weather. When sown early in the autumn they appear in the following spring, and will then require to be shaded from the sun, and frequently refreshed with water during the first summer. When transplanted in the autumn the beds should be covered with moss, to secure them from the frosts of winter and the drought of summer.

The rhododendron is emblematical of the dangers that lurk about the imperial purple.

THE WILLOW-LEAVED SPIRÆA. — SPIRÆA SALICIFOLIA, SPIRÆ FRUTEX.

Natural order, Pomaceæ. Rosaceæ, Juss. A genus of the Icosandria Pentagynia class.

——— “ How far, beyond the transient glare
Of fickle fashion, or of formal art,
Thy flowery works with charm perennial please.”

MASON.

THIS beautiful species of spiræa, that garnishes its taper stalks with spikes of flesh-coloured flowers so agreeably in the months of June and July, springs in the deserts to cheer the banished Muscovites, whom the tyranny of despotic rulers sends to waste their bloom of manhood, in the dreary regions of Siberia.

“ Peaceful and lowly in their native soil,
They neither know to spin or care to toil;
Yet with confest magnificence deride
The vile attire, and impotence of pride.” PRIOR.

This ornamental shrub begins to flourish about the banks of the river Oby, and from thence becomes more abundant about the

Jenisea, and in the country beyond the lake Baikal.

It seems to love the soil of this country, as it has by some accident crept out of the garden into our hedgerows, where it has been found in Westmoreland, in many places on the borders of Winandermere, and also between Pooldridge and Colthouse, near Hawkshead, Cumberland, and in a wood at Hafod, Cardiganshire. From these circumstances some authors have supposed the spiræa salicifolia was a native of this country, but this opinion is refuted by the plant itself, which seldom or ever perfects its seed in this island, even under the most favourable circumstances of cultivation. It is increased rapidly in moist situations by suckers, and its whole height is one year's growth from the root, like the stalks of the raspberry plant. In rich ground the shoots are often five or six feet high, but in moderate soil not above three or four feet. The leaves are set alternately on the rods, and are of a bright green, and therefore should be planted with evergreens of a dark shade, which heighten the effect of the spikes or clusters of little flowers that form a conical top to each branch; and as the numerous stamens stand out much beyond the petals, and are of the same pink

or flesh colour, it forms altogether a singular and pretty flower, but rather of a stiff than a graceful nature. They have a slight scent, just before the petals expand, and the colour is then of a fine rose tint, but when fully opened they are of a pale flesh colour; and as each of these small corollas has about twenty stamens, headed with a yellow anther, it may be called Titania's pin-cushion, as the racemes appear to be crowded with fairy pins.

It appears, from Rea's Flora, that the common spiræa frutex was cultivated in our gardens previous to 1665.

This shrub is increased by suckers, or by parting the roots in the autumn.

The Hortus Kewensis notices seventeen species of spiræa, besides several varieties.

SPRUCE FIR. — PINUS ABIES.

*Natural' order, Coniferae: A genus of the
Monœcia Monadelphica class.*

“ High o’er the pines, that with their darkening shade
Surround yon craggy bank, the castle rears
Its crumbling turrets.” MICKLE.

“ Here waving groves a chequer’d scene display,
And part admit, and part exclude the day.” POPE.

THE Norway spruce, *abies*, is the loftiest of all the European trees, often attaining the height of 150 feet, whilst in shape it forms one of the most elegant pyramids of this genus of plants; and for the thickness of its foliage, and the beauty of its vivid green, it is so superior to the common Scotch fir, that it is now much more frequently planted in ornamental grounds than any other species of pine, excepting the larch.

The leaves of the spruce are set on the branches, solitary, and without order, but on all sides; they are slightly keeled on both sides, and shining on the upper surface. Both the catkins and the cones when young

are of a purple colour; each cone contains about 365 seeds, being generally eight rows of scales, of twenty-three each, and every scale contains two seeds.

This towering tree is a native of the North of Europe, and abounds in the vast woods of Norway, from whence immense quantities of this timber are annually imported into this country for the purposes of building, it being the white deal so much used in modern houses.

It seems to have been cultivated in this country at an early period. It was noticed as long back as 1548; and Gerard tells us, in 1597, that he had seen it growing in Cheshire, Staffordshire, and Lancashire; and as this author had visited Norway, where he had seen "the goodliest trees in the worlde of this kinde," we cannot suppose that he could have been mistaken. Nor can we be surprised that Evelyn should only have noticed a few solitary trees of this kind, when Plot tells us, that during the civil contest in the reign of Charles the First, "wood has become so scarce, that it is a common thing to sell it by weight, not only at Oxford, but in other places in the northern parts of the shire; if brought to moreat (market), it is ordinarily sold for about one shilling the hun-

dred weight, but remote from great towns it may be had for seven-pence," which, according to the value of money in that age, would be equal to nearly a half-penny per pound weight; and if we take into consideration that mineral coal was then but little used, as fuel, it is not extraordinary that every tree fit to cut should then have bowed to the hatchet.

No sooner, however, was the nation in a state of quiet and settled government, than the poverty of the woods and forests was immediately discovered, and Evelyn sent forth his *Silva*, with the most persuasive arguments in favour of planting, to which we owe, even at this day, the existence of many noble trees.

The planting of trees seems to be almost a religious duty with those who have suitable lands, for as our ancestors planted for us, so are we in honour bound to plant for posterity. Those who plant oaks look forward to future ages only, and therefore, deserve the highest commendation; but all our praise and admiration of such acts cannot be so valuable to them as their own satisfaction, which must arise amidst groves of their own planting, for there is a serene and settled majesty in woodland scenery, that enters into the soul, and dilates it, and fills it with noble ideas. It is

observed that few men live to see the full beauty of the trees they plant. The cause of this is principally that they do not begin to plant until they are old, for youth is too frequently employed with the hewers to attend to the planter. But it is never too late in life to plant, and the beauty of young trees may be compared to the beauty which the parent discovers in his infant children; the pleasure of seeing them expand is perhaps quite equal to what is enjoyed when fully matured by time.

The Norway spruce fir offers particular advantages to the planter, as it is equally durable at all ages, like the larch, and therefore will bring a price whenever cut, even of the smallest dimensions; and as it grows perfectly straight, it soon becomes fit for scaffolding poles, and other similar purposes, and as it increases in size, for masts of vessels, &c. Loudon observes, that this tree is peculiarly valuable as a nurse, from being evergreen, and closely covered with branches, by which radiating heat is retained; from its conical shape and rigid stem, by which it does not suffocate or whip the adjoining trees. It must be observed, however, that this tree will not thrive in all situations where the common pine and larch flourish, as the spruce

loves a cold soil, and rather sheltered situations.

The finest specimens of these trees which this country now boasts of are at Blenheim, Harefield Park, and at Temple Newsham.

The air that is impregnated with the exhalations of these trees is reckoned very wholesome, particularly for phthisical persons; and the fresh cones boiled in whey, and beer brewed with the tender tops of the branches of the spruce, are accounted good in inveterate scurvies.

From the resin which this tree yields by incision, Burgundy pitch and turpentine are procured.

The American spruce, *alba* and *nigra*.

The cones, both of the white and the black spruce, were sent from Virginia to England by Mr. Bannister, about the year 1700, and several trees were raised from them, in the gardens of Compton, Bishop of London, at Fulham, and at some other places. About the same time cones were also brought from Newfoundland, from which many fine trees were raised in Devonshire. The white spruce is known by a pale bluish-green leaf, and it is from this variety principally that the essence of spruce is obtained, which is so celebrated

in forming spruce beer; but a decoction may be procured from the young shoots of either of the species of spruce, that answers every purpose for making this antiscorbutic beer, the most simple receipt for brewing of which, is to take sixteen gallons of water, and boil the half of it; put the water thus boiled, while in full heat, to the reserved part, which should be previously put into a barrel or other vessel; thereto add sixteen pounds of treacle, with a few table spoonfuls of the essence of spruce, stirring the whole well together; add half a pint of yeast, and keep it in a temperate situation, with the bung-hole open, for two days, till the fermentation is abated; then bottle it off, and it will be fit to drink in a few days afterwards.

SUMACH. — RHUS.

Natural order, Dumosæ. Terebinthaceæ, Juss.
A genus of the Pentandria Trigynia class.

“ Let fancy lead,
 And be it ours to follow, and admire,
 As well we may, the graces infinite
 Of nature.” HURDIS.

— “ Not a flower
 But shows some touch, in freckle, streak, or stain,
 Of his unrivalled pencil. He inspires
 Their balmy odours, and imparts their hues,
 And bathes their eyes with nectar, and includes,
 In grains as countless as the sea-side sands,
 The forms with which he sprinkles all the earth.”

THE name of Sumach for this shrub is the same by which it is distinguished by the Arabs. The Greeks called it *Ρους*, *rhus*, and *rhous*, from the verb *rheo*, I run, or flow, on account of the nature of the root, which spreads itself to a great distance, sending up numerous suckers. The Latins followed the Greek name of this plant; but as its seed was anciently used for seasoning meat instead of salt,

it was called *Rhus Obsohiorum**, and *Rhus Coriaria*, from its use in dressing of leather, and for which purpose its branches are still in great demand among the Turks for tanning their Morocco leather. The elm-leaved sumach, *rhus coriaria*, grows naturally in India, Syria, about Aleppo and Rama, in Italy, Spain, and the south of France, and also near Algiers in Africa.

Dr. Turner says, in his Herbal of 1568, “The sumach groweth in no place of England, or Germanye, that ever I sawe, but I have sene it in Italy, a little from Bononye, in the mounte Appennine.” It appears, however, to have been cultivated in this country previous to 1597, as Gerard mentions it in his Herbal of that year; and from the Catalogue of the botanic garden at Oxford, it appears to have been planted there before the year 1648.

The flowers of this species of sumach grow in loose panicles at the end of the branches, each panicle being composed of several thick spikes of flowers sitting close to the footstalks; they are of a whitish herbaceous colour, and

* The Tripoli merchants still find sale for the seeds of this shrub at Aleppo, where they are in common use there at meals to provoke an appetite, being ground into powder as we grind mustard seed.

appear in July, but seldom if ever ripen their seeds in England.

The Virginian sumach, *Rhus typhina*, is a native of North America, as its name imports. Parkinson is the oldest author who notices it in this country: he tells us, in 1629, that it was then “only kept as a rarity and ornament to a garden and orchard.” This species of sumach was formerly called the Stag’s-horn tree, from the branches being shaped like those of the stag’s-horn, and like them covered with a soft velvet-like down, which, both in colour and texture, resemble that of a young stag’s-horn.

This tree is both singular and beautiful, the flowers being produced in close tufts at the end of each branch, of a reddish purple colour, in the shape of a spearhead. They make their appearance in July, and are then succeeded by the seed, which is inclosed in a woolly succulent cover of a purple colour, which has a good effect during the whole of the autumnal months.

The leaves are long, and elegantly pinnated with six or seven pairs of leaflets, terminated by an odd one, which hang in a most graceful manner. The shrub grows from ten to fifteen feet in height, and therefore should fill a middle station in the shrubbery, between

tall evergreens, and lower shrubs. The variety this plant affords in the autumn, by the gay tints of its foliage, is not surpassed in beauty by any shrub we possess, as it is sometimes quite purple, and at others of a fine red, before it changes to its last feuilemort colour. It is one of the trees that is particularly handsome to look down upon.

This shrub, as well as the elm-leaved sumach, is used for tanning leather; and the roots are used in medicine in Virginia and Carolina.

The sumach sends up numerous suckers, by which means it is so easily increased, that there is little occasion to sow the seed when once a single plant is obtained. The Hortus Kewensis notices eleven species of this plant that will endure our winters, and nine species that require the greenhouse, and one the stove.

SYCAMORE, or GREAT MAPLE. — ACER
PSEUDO-PLATANUS.

*Natural order, Trihilatæ. Acera, Juss. A
genus of the Polygamia Monœcia class.*

“ Nor unnoticed pass
The sycamore, capricious in attire,
Now green, now tawny, and, ere autumn yet
Have changed the woods.” COWPER.

THE great maple-tree was called, in Greek, Σφένδαμνος, *Sp'endannos*; but Saint Luke, who wrote his gospel in Rome, probably changed the Latin name of this tree into Greek, as he calls it Συκομωραία, *Sycomoraia*, (chap. xix. ver. 4.), from whence we have evidently derived the name of Sycamore.

The sycamore became celebrated as being the tree on which Zaccheus climbed to see Christ pass on his way to Jerusalem, when the people strewed leaves and branches of palm and other trees in his way, exclaiming, “ Hosanna to the son of David;” and to commemorate which, the Catholic Church still retains the practice of blessing branches

of the palm-tree on the Sunday before Easter, which is hence called Palm Sunday. In Germany, they consecrate branches of willow, as that was supposed to have been one of the trees from which the disciples gathered boughs for the purpose mentioned, and this is also the tree which is still used for the same reason in many parts of this country. In Switzerland the pine is used. In France the box, excepting the southern provinces, where, as well as in Spain and Italy, the palm is still employed.*

Notwithstanding the *Hortus Kewensis*, and the British Botanist mention the sycamore to be a native tree of this country, we certainly cannot consider it in any other light than an exotic. Dr. Turner does not mention even having seen this tree in his time, 1568, and Gerard says, in 1597, "The great maple is a stranger in England, only it groweth in the walkes and places of pleasure of noblemen, where it especially is planted for the shadowe sake, and vnder the name of sycomore tree." Parkinson makes the same observation, in 1640, and says, "It is no where found wilde or naturall in our land that I can learne, but

* See the history of the palm-tree in the *Pomarium Britannicum*.

only planted in orchards or walkes for the shadowe's sake."

Evelyn says, positively, that it is not indigenous to our soil.

Chaucer, it is true, mentions the sycamore as long back as the fourteenth century; but as it is described by him in a kind of poetical dream, we conclude it was from the knowledge he obtained of this tree when abroad; but even if it were known in England in his time, it was evidently rare, as his verse insinuates; and as it may not be uninteresting to many of our readers to have Chaucer's description of an arbour, we give the following extract:

——— " Till it me brought
To a rich pleasaunt herber wel ywrought,
Which that benched was, and, with turfes new,
So small, so thick, so short, so fresh of hew,
That most like to grene woll, wot I, it was.
The hegge also—that yeden in compas,
And closed in alle the grene herber,
With sycamor was set, and eglatere,
Wrether in fere so well and cunningly,
That every braunch and lese grew by mesure
Plain as a bord, of an height, by and by;
I se neuer a thing (I you ensure)
So well ydone; for he that toke the cure.
It for to make, (I trowe), did all his peine
To make it pass, alltho that men have seine."

St. Jerome, who died in the beginning of the fourth century after Christ, tells us, that he saw the sycamore tree which Zaccheus

climbed up to see our Saviour ride in triumph to Jerusalem, which proved that it would stand long without decaying; and perhaps this motive induced religious persons in this country to plant it near their dwellings. Evelyn condemns the practice of planting sycamores in gardens. He says, in his *Silva*, "It is much more in reputation for its shade than it deserves; for the honeydew leaves, which fall early, like those of the ash, turn to mucilage and noxious insects, and putrefy with the first moisture of the season, so as they contaminate and marr our walks; and are, therefore, by my consent, to be banished from all curious gardens and avenues." Vauxhall and Marylebone gardens were originally planted with sycamore-trees.

The sycamore timber was much more in request in the time of trenchers and wooden bowls than at present; for since the use of earthenware has become so common with all classes, the demand for this, and other soft white woods, has greatly decreased.

Like the birch tree, the sycamore gives out great abundance of saccharine juice, when tapped, either in the spring or autumn, from which wine was formerly made in this country; and Dr. Tongue tells us, in the *Philosophical Transactions*, vol. iv., that the sap of

this tree is sweet and wholesome, and in a short time the trunk yields sufficient quantity to brew with; so that with one bushel of malt is made as good ale as four bushels with ordinary water. The sycamore has always been esteemed a good fire-wood, which in former ages was no small recommendation, and the timber is valuable for the interior parts of buildings.

The sycamore is highly ornamental in rural scenery, particularly in the neighbourhood of plantations of fir and pine, where a few scattered trees of this description should always be intermixed to relieve the monotonous appearance of the dark tints of those spiral trees; for in the spring the fine green of the sycamore leaf contrasts as agreeably as its varying foliage is embellishing in the autumn.

An enormous tree of this kind formerly stood before the Duke of Dorset's seat at Knowle, in Kent, which measured from twelve to fourteen feet in circumference.

It is not more singular than true, that we find those trees which are best enabled to resist the spray of the sea less frequently planted in those situations than elsewhere.

The sycamore thrives on the coast when planted there, even better than the elm; for, like the ash, it does not send out its leaves

until after the March winds are exhausted; and it sheds its foliage in the autumn, before the equinoctial gales commence. The tree is of quick growth; and if we may judge from those in the master's piece, at Sidney-Sussex college, in Cambridge, it is durable, as those trees were planted in 1607. That sycamore-trees may be planted to considerable advantage in many situations, may be judged from a statement that is made in a work entitled "Practical Economy," which tells us, that a piece of ground in Scotland, not worth thirty shillings per acre, for agricultural purposes, was planted with sycamores, and at the end of sixty years the trees fetched such a sum as paid fourteen pounds per acre per annum during that long period.

The flowers of the sycamore-tree are suspended in long bunches, and usually blow about the end of April, when, if their pollen be obtained and viewed through a microscope, each particle will be found of a globular shape; but if it be touched with any thing moist, the globules burst open with four valves, and they appear in form of a cross.

"What vast perfection cannot nature crowd
Into a poynt!"

HURDIS.

These trees are propagated by gathering

the seeds in the autumn, when ripe, and sowing them as has been directed for the ash. In the spring they will appear, and, if the ground be tolerably good, will make a shoot of eighteen inches by the autumn. In the following spring they should be planted in the nursery in rows, two feet and a half from each other. Here they may remain till they are large enough to plant out for good, without farther trouble than taking off unsightly side branches, and digging between the rows every winter.

SYRINGA, OR MOCK ORANGE. — *Philadelphus*.

Natural order, Hesperideæ. Myrti, Juss. A genus of the Icôsandria Monogynia class.

“ The sweet syringa yielding but in scent
To the rich orange ;” —

MASON.

“ Oh ! who that loves with curious eye to trace
Nature’s least beauty, or most transient grace,
Can walk a garden’s cultivated ground,
At morn, when flowers their fragrance breathe around,
Nor feel, as he inhales the balmy air,
And views the world of loveliness that’s there,
His genius and his taste grow more refin’d,
And Fancy’s vista open on his mind.”

J. PLAYER.

THE Syringa, which covers its branches so beautifully with ivory-coloured flowers, and embalms our groves with its fragrance so agreeably, in the months of May and June, has been made the emblem of memory, because when once we inhale this penetrating odour, it continues to follow us every where for a considerable time.

Oh! memory, thou fond deceiver,
 Still importunate and vain,
 To former joys recurring ever,
 And turning all the past to pain.
 Tho' like the world, the oppressor oppressing,
 Thy smiles increase the wretch's woe:
 And he who wants each other blessing,
 In thee must ever find a foe."

GOLDSMITH.

The Greeks named this plant *Φιλαδέλφος*, from Ptolemy Philadelphus, king of Egypt; but on what account we are left to surmise. The name of syringa comes from the Greek word *syrinx*, flute, because it was one of the woods from which musical instruments were manufactured.

It is frequently called the mock-orange, from the resemblance the flowers and their perfume have to those of the citrus tribe. The petals of these flowers are frequently used with black or Souchong tea, to which they give the flavour of gunpowder tea; and the young leaves are often sent to table with spring sallad, on account of their having the taste of fresh cucumbers.

The syringa mixes very agreeably with evergreens of a dark tint, as its own foliage is of a yellowish or apple green, and the white flowers are seen to greater advantage when interspersed with deeper coloured plants.

Although this shrub is never injured by the severity of our winters, yet it often suffers in the spring; and the beauty of the leaves and flowers are hurt when planted in exposed situations. . One of the great recommendations of this plant is, that it will thrive in confined places, and under the shade and drip of trees, as may be particularly observed in the walks of Kensington gardens, where there are many very old and lofty shrubs of this kind growing under the elms, where they scarce get a gleam of the sun's reviving beams. It is with particular pleasure that we see these fine grounds so well protected by keepers, and so improved in neatness; but it would still be a great improvement to these walks, were the borders enlivened with hardy native flowers, such as the primrose, blue bottle, wood anemones, and other similar plants that love the shade; which would give the close-pent man an opportunity to peep at nature. But probably it is imagined that

—— “ such a gloom,

Suits well the thoughtful, or unthinking mind;
The mind contemplative, with some new theme
Pregnant, or indisposed alike to all.”

COWPER.

The native place of this odoriferous flower-

ing shrub seems undecided on; Linnæus says, but with doubt, about Verona. Bay observed it near Mount Saleve in Savoy, far from any house; but he did not venture to pronounce it wild there. Haller and Krockner speak of it only as a denizen; and Allioni as of exotic origin. Villars says it is not indigenous to Dauphiné, though it is found in hedges far from habitations. From its being more familiar to the Greeks than to the Romans, who had no Latin name for this plant, we may safely surmise that it is a native of more eastern countries.

The syringa was common in this country in 1597; as Gerard tells us, that he had great plenty of it in his garden.

The Carolina syringa *coranarius* was introduced in 1738: this species is inodorous, and therefore preferred by those who find the perfume of the common variety too powerful. We certainly prefer this species for forcing, as we have frequently found the fragrance of the former kind oppressive when placed in warm rooms.

The syringa was found in New Zealand, by Captain Cook, whose sailors used the young shoots as a substitute for tea.

They found the infusion sweetly aromatic and fragrant; in a short time, however, it be-

came very bitter. It was also found in the same place by Sir Joseph Banks.

The syringa thrives best in a light, good earth; and as it throws up numerous suckers, it is easily propagated by them. It may also be increased by cuttings, planted in October, in a moist shady border, or by layers from the young twigs put into the ground in the winter.

TRAVELLER'S JOY, OR COMMON VIRGIN'S BOWER. — CLEMATIS VITALBA.

Natural order, Multisiliquæ. Ranunculææ, Juss. A genus of the Polyandria Polygynia class.

— “ and let us o’er the fields,
Across the down, or through the shelving wood,
Wind our uncertain way.

— and let us read
The living page, whose every character
Delights, and gives us wisdom.” HURDIS.

“ These, Nature’s works, the curious mind employ,
Inspire a soothing melancholy joy.”

Rev. Mr. WHITE.

THIS native species of Clematis was first named Traveller’s Joy by Gerard, in the year 1597; and we know no person who had a more just claim to give a name to a plant than this author, who was so indefatigable in discovering the history of our indigenous plants, and naturalizing others to our soil. English botanists have therefore preserved the name, through respect to this father of British herbalists.

“ It is,” says this Elizabethian author, “ called commonly *Viorna quasi vias ornans*, of decking and adorning waies and hedges, where people trauell, and thereupon I have named it the Traueiler’s Joie.”

It is called *Clematis*, from κλήμα, *viticula*, *sarmentum*, because it climbs trees, by means of its pliant twigs, like those of the vine, and Virgin’s bower, from its use in covering arbours and forming natural bowers. It abounds principally in the counties south of London, and particularly in hilly situations, where the soil is of a chalky nature. The hedges on the Surrey hills, as well as those in Kent, Sussex, and Hampshire, are often covered with this singular vine, the branches of which frequently extend to twenty feet or more, climbing every bush and tree in their neighbourhood by means of twisted petioles, with which they make their hold so secure that it appears almost like instinct to see how firmly they grasp the support they meet with, then falling in graceful festoons from bough to bough, or throwing themselves in all directions over the hedges,

— — — — — “ recompensing well
The strength they borrow with the grace they lend.”

The young branches are of a purple colour, and the leaves, which consist of two pairs of leaflets with an odd one, are of a yellow green. The flowers, which appear in July, are in axillary racemens, conjugate, leafy, dividing first into three, then into two smaller branches. The flowers are small, and have four petals, which are a little rolled back, of a greenish white, and they are slightly perfumed. But the principal beauty of this shrub consists in the singular manner by which the seed is covered by a downy substance, and the long plumose tail which is attached to each of these little seeds, which, being in clusters of about twenty, give the appearance of so many bunches of feathers; and the bushes are often seen from October to Christmas completely clad in these vegetable feathery tufts, which seem intended to convey them from hill to hill, where they are hunted by various birds for the sake of the seed, with as much avidity as the hawk hunts the lark. The shepherds often cut the old wood of this vine, which they light at one end, and smoke instead of a pipe of tobacco.

TRUMPET FLOWER. — BIGNONIA.

Natural order; Personatae. Bignoniæ, Juss.
A genus of the Didynamia Angiospermia
class.

Fleurs charmantes ! par vous la nature est plus belle :
 Dans ses brillans tableaux l'art vous prend pour modèle
 Simple tribut du cœur, vos dons sont chaque jour
 Offerts par l'amitié, hasardés par l'amour."

DELILLE.

THIS beautiful family of shrubs and climbing plants, which the discovery of a new world exhibited to us without a name, were by Tournefort called Bignonia, in compliment to Abbé Bignon, the librarian to Louis the Fourteenth. The English name of Trumpet flower has been given to this species of plants, because the corolla of the flower is of a tubular shape, somewhat resembling a trumpet.

The ash-leaved trumpet flower, *Bignonia radicans*, was brought from North America about the year 1640; and it is found to be

be one of the most hardy as well as the most splendid of all the species of these plants, that have yet been introduced into this country. In its native country the *Bignonia radicans* fixes itself to the forest-trees in a similar manner to the European ivy, putting out little fibrous roots at every joint, from whence the trivial name of *radicans*.

In this country it is generally planted against a wall, where it strikes into the mortar of the joints so strongly as to support the branches as firmly as the strongest nails can do, although it sometimes reaches to the height of forty or fifty feet. The leaves are produced opposite at every joint, and are composed of four pairs of leaflets, terminated by an odd one, similar to those of the ash tree, but of a much richer green. The flowers have a cylindrical corolla divided into five lips of equal size, of a colour similar to carmine-laid over an orange ground. The toothed calyx is persisting and of the same rich colour as the corolla; and as the flower buds are progressive, the branches have a display of blossoms from July to the beginning of November, for as some of the corollas drop off others open in succession:

The flowers are produced in large bunches at the end of the shoots of the same year, and the effect is magnificent when the shrub is in full blossom. We have found this species of *bignonia* easily propagated by layers, or cuttings of the same year's growth, with about an inch of the former year's wood. This plant loves a rich soil, and a south aspect. Whilst young it is frequently injured by the ants, that devour the leaves even to a skeleton, and sometimes destroy the blossoms.

We have now about sixty species of this genus of plants, most of them eminent for the beauty of their flowers; but as the majority of them belong to tropical regions, we must not hope to see them mixing with the plants of the shrubbery.

The welshed trumpet flower, *bignonia venusta*, which blossomed in the autumn of 1817, in the hot-house of Lord Liverpool, at Combe Wood, was raised from seed received from the Brazils, by Lady Liverpool; and as it is a native of the same neighbourhood as the common blue passion flower, we are not without the hope that it will be found equally hardy when it becomes enured to our climate.

This magnificent flower, whose corollas are of the most vivid orange vermillion colour, is correctly represented in the 35th Number of the Botanical Register.

TULIP TREE — LIRIODENDRON. —
TULIPIFERA.

Natural order, Coadunatæ. Magnoliæ, Juss.
A genus of the Polyandria Polygynia class.

THIS superb forest tree is named *Liriodendron* from $\Delta\epsilon\nu\delta\rho\omicron\nu$, and $\lambda\epsilon\iota\rho\iota\omicron\nu$, lily. As it is a tree bearing liliaceous flowers, it is also called *Tulipifera*, tulip tree, from the resemblance which the blossoms bear to that flower. The word tulip is of Turkish extraction, and given to the flower on account of its resembling a turban.

The vegetable world cannot present us with a more interesting object than a tree of such exalted stature, covered with a foliage so singular and beautiful, as is the tulip-tree of North America. Its spreading branches give an extensive shade, whilst they are covered with an immensity of large and variegated flowers, that appear placed on the boughs like so many porcelain vases, to catch the dews of heaven.

It is hardly possible to contemplate this noble tree, without having all sordid and angry passions driven from the breast, and exchanged for those of peace and philanthropy. We wonder, therefore, that the poets, who are naturally lovers of trees, and have awakened our interest so much in favour of most others, should so long have neglected to sing the praise of this sylvan wonder of the new world, as to leave us without a head to our chapter.

Michaux tells us, in his work on the Forest Trees of North America, that the middle and western states abound with the *Liriodendron tulipifera*, some of which he measured, that were twenty-two feet and a half in circumference, five feet from the ground, and from one hundred and twenty to one hundred and forty feet in height. He tells us, that the timber is one of the most useful species of wood, being smooth and fine grained, easily wrought, and not liable to split, therefore desirable for the turner, as also for carving ornaments, pannels of coaches, chaise bodies, &c. It is also used for forming canoes; and frequently the trees are of sufficient size to hollow into the shape of those boats, so that they are of one piece of timber. Kalm speaks of having seen a barn of considerable

size, the sides and roof of which were made of a single tulip-tree, split into boards.

Mr. Catesby, in his Natural History of Carolina, says, there are some of these trees in America which are thirty feet in circumference. There is one inconvenience attending this wood, which is, that it contracts and expands itself more than almost any other timber.

The bark is an aromatic medicinal agent : it is often pounded, and given to horses that have the bots. The roots of the tulip-tree are said to be as efficacious in agues as Jesuits' bark.

In America, these trees are distinguishable at a great distance, even when they have no leaves upon them, as the boughs are unequal and irregular, making several bends or elbows. Kalm observes, that it is very agreeable, at the end of May, to see one of these large trees, with its singular leaves, covered for a fortnight together with flowers, which have the shape, size, and partly the colour of tulips.

The leaves of this tree are generally from four to five inches broad, and about the same in length, of a singular shape, being what is termed abrupt, *truncatum*, appearing as if their ends were cut off with scissars; the side lobes are rounded, and end in blunt

points. The upper surface of the leaves is smooth, and of a lucid green; the under side is of a pale green; and as they are supported on foot-stalks of four inches long, they hang and move in a very graceful manner. The flowers are produced at the end of the branches; they are, like the tulip, composed of six petals, three without and three within, which form a sort of bell-shaped flower that encloses the fruit, which is a kind of cone that has a stigma to each globosity. The filaments are numerous, and crowned with linear anthers, growing longitudinally to the sides of the filaments. The petals are of a greenish white, marked near the base with ochre yellow, and spotted with red, that gives them a fine appearance, particularly to look into; but they fall short of that gay appearance which most people expect at first seeing them, from the name being the same as that of the flower so celebrated for its gaudy colours. The flowers appear in July and August, but we know of no instance of their having ripened seed in this country.

The Hortus Kewensis notices the introduction of this tree into England, as long back as 1663; and Ray tells us, that it was cultivated by Bishop Compton, at Fulham, in 1668. When first it was raised in this country, it

was kept in pots and tubs, and housed in the winter, it being supposed to be of too tender a nature to live in the open air; but in this state it made but little progress, whilst one that was planted amongst other trees, in a wilderness or gardens of the Earl of Peterborough, at Parson's Green, near Fulham, by its growth soon convinced the gardeners of the mistake they had made. This was the first tulip-tree which flowered in this kingdom.

When the hardy nature of this beautiful tree was known, many were planted in different parts of the country, some of which have arrived to a large size, especially those that were set in a rich moist soil.

The finest trees of this kind that we have seen are in the gardens of the Earl of Egremount, at Petworth, in Sussex, one of which has a trunk, that at seven feet from the ground measures ten feet three inches in circumference; it then branches into seven limbs, three of which are five feet eight inches each in girth, and the other four limbs are three feet nine inches each. The height of the tree is about ninety feet, and its boughs extend to a circle of one hundred and eighty-nine feet, or sixty-three feet diameter.

There are also some tulip-trees, of great

bulk and beauty, at Wilton, the seat of the Earl of Pembroke; at Waltham Abbey, and many other places, in various parts of the country. The late Marquis of Londonderry took great delight in a tree of this kind, which grew on his lawn at Craysfoot, in Kent; where long may it remain, sacred, as a memento to mankind, that the most exalted situations are often the most perilous, and that happier hours may be spent under the shade of *Liriodendron*, than near the blazing splendour of a throne.

— “ Who, that lives,
Hath not his portion of calamity ?
Who, that feels, can boast a tranquil bosom ?

Mrs. ROBINSON.

Mr. Darby, at Hoxton, and Mr. Fairchild, are said to have been the first, who raised tulip-trees in any quantity from seeds, and from them the gardens abroad were chiefly supplied. The original tree at Parson's Green is quite destroyed; not so much by age as by the other trees which were suffered to overhang it, and rob it of its nourishment, from a fear of taking them down, lest by admitting the cold air to the tulip-tree it would be injured.

The French gardeners notice the following varieties of this tree: 1st, *Liriodendron acu-*

tiloba, with lobes acute, acuminate: 2dly, *L. obtusifolia*, with obtuse leaves: 3dly, *L. integrifolia*, with leaves entire: 4thly, *L. flava* yellow-flowered. This last variety deserves the preference, because its flower is larger, of a bright yellow, and sweet perfume.

These trees are propagated by seed, that is now annually imported from America; and it is also increased by layers; but these are commonly two or three years before they take root, and the trees so raised are seldom so fine as those raised from seeds; but, like all other stunted plants, they flower sooner. When raised from layers, we should recommend the branches to be ring-barked, which would facilitate the obtaining roots.

The tulip-tree prospers best in a light, loamy soil, not too dry.

A tree of such extraordinary stateliness and beauty deserves a more frequent place in ornamental plantations than we yet find it occupying. It is a proper ornament for the park, and would, in this situation, become a more durable monument, to commemorate any local or family event, than those generally raised of stone or marble, whilst the difference of expence would be found to be as pence are to pounds.

TAMARIŠK. — TAMARIX.

Natural order, Succulentæ. Portulacææ, Juss.
A genus of the Pentandria Trigynia class.

“ On yon rough craig,
 Where the wild tamarisk whistles to the sea blast.”

H. DAVY.

“ Their power mysterious let thy knowledge shift,
 Their useful poisons, and their healing gift;
 Where'er they rise, no part of earth is lost,
 Since e'en the desert may its beanny boast.”

DELILLE.

THIS flexible shrub is the *Myrica* of the Greeks, and the *Myrica* and *Tamarix* of the Latins. The latter name is supposed to have been derived from the Hebrew *Tamaris*, (*abstersio*,) on account of its abstergent qualities. It was a celebrated medicinal plant with the ancient Arabians, from whom the Latin authors seem to have borrowed their knowledge of the virtues of this plant; and the high encomiums which these Æsculapian writers bestowed on the tamarisk, induced Grindall, Archbishop of Canterbury, to in-

introduce it into this country, as a specific in disorders of the spleen. Camden, in his Life of Elizabeth, notices that the tamarisk was first brought into England by Archbishop Grindal; and in the Remembrances for Master S., by Richard Hakluyt, 1582, we are told, likewise, that “when this archbishop returned out of Germany, he brought into this realm the plant of tamariske from thence, and this plant he hath so increased, that there be here thousands of them; and many people have received great health by this plant.” *

Dr. Turner writes fully on this plant in his Herbal, that was published in 1568; when it appears to have been unknown in this country; for he observes, “It may be named, in English, Tamarisk, because, as we want the bushe, so also we have no name for it in England.” This author tells us, that he “saw it in diuerse landes in Italy, in an yland betwene Francolino and Wenish, in Germany, in diuerse places about the Ren, not far from Strasburg; and in Rhetia, in a stony place, som tyme of yeare used to be ouerflowen with the Rhene.”

Getard notices, that it grows in Germany, Spain, Italy, and in Greece; and he tells us, that both species of this plant grew in his garden in 1596.

Later botanists mention it as a native plant, because Mr. Giddy, and W. G. Mason, Esq. found it growing on St. Michael's Mount, Cornwall, in the year 1794, as also near Hurst Castle, Hants; and Dr. Goodenough saw it near Hastings, in Sussex; but this is by no means satisfactorily proving it to be indigenous to our soil; as in all probability it sprang from cultivation in the two latter places, and from some accidental circumstance on the former spot, for it is of so easy propagation, that the least sprig of it will often take root when thrown on the earth; and its not maturing its seed in this country is a sufficient proof of its foreign origin.

The tamarisk has been frequently celebrated in the verses of the ancient poets. Homer mentions it as the tree against which Achilles laid his spear before he plunged into the Xanthus, to pursue the routed Trojans. It is introduced in the Pastorals of Theocritus, and Virgil has noticed it several times in his Eclogues. Its name may also be found in several passages of the poems of Ovid.

The Romans considered it an accursed plant, and frequently speak of it as the unhappy tamarisk, as it was used for wreaths to put on the heads of criminals. But, as a remedy for diseases of the spleen, it was con-

sidered of such efficacy, that drinking-cups were made out of this wood for those that laboured under this complaint; and the physicians ordered their patients to eat out of dishes formed from tamarisk-wood.

The magicians used it to impose upon the credulous by their pretended magical powers; and they ascribed qualities to this plant too much against common reason and decency to mention. Pliny mentions its use for besoms amongst the Romans.

It is found abundantly on the mountains of Dauria and Caucasus in the Russian empire; and the Russians and Tartars use a decoction of the twigs in the gout and rheumatism, and contusions of the limbs, as a fomentation; they also drink it in case of internal injury. They make handles for whips, &c. of the wood.

Dr. Smith remarked this plant in great plenty in Italy, about Sinigaglia, and all along the hedges near the sea, where the sheep preferred it to every other food, never touching any other vegetable while that remained. It grows plentifully also on the coast in Algiers, as well as in Japan. In some places it grows to a tree of middle size; but in England it remains as a shrub, seldom exceeding fourteen or sixteen feet in height.

The tamarisk thrives in bleak situations by the sea-side, where most other trees and shrubs are cut off by the blast; for the branches of this plant are so pliable, that they bend without resisting the slightest gale, thus reminding us of the fable of the reed and the oak, or the lines of Hurd.

“ And so the storm,
That makes the high elm coach, and rends the oak,
The humble hly spares. A thousand blows,
That shake the lofty monarch on his throne,
We lesser folks feel not. Keen are the pains
Advancement often brings. To be secure,
Be humble: ‘o be happy, be content.”

We have few shrubs more graceful than the tamarisk, its slender branches being covered with a chesnut-coloured bark, and garnished with very narrow leaves, lying over each other, like the scales of fish, and of a fine bright-green colour. This plant is in appearance between the cypress and the common heath. Its flowers appear in July, and are produced in taper-spikes at the ends of the branches; they are very small, and set close all round the spike, of a lilac colour, with red anthers. These are succeeded by oblong, acute-pointed, three-cornered capsules, filled with small downy seeds.

When planted in the shrubbery, the tamarisk should mix with plants of broad and fixed

foliage, as the laurel or holly. It is also calculated to cover the sides of hills, where it is desirable not to take off the view by taller trees ; but its principal advantage over most other shrubs is in marine gardens, where it soon acquires sufficient height to protect rose-bushes and other low flowering shrubs. The tamarisk is a deciduous tree, although, when in foliage, it has all the character and appearance of an evergreen shrub.

-The tamarisk is easily propagated by planting cuttings of the last summer's growth in a moist soil. The German sort grows naturally in low watery grounds, and is an agreeable ornament to the banks of lakes or rivers.

“ Admit it partially, and half exclude,
And half reveal its graces.”

VIRGINIAN CREEPER, — HEDERA
QUINQUEFOLIA.

Natural order, Hederaceæ. Caprifolia, Juss.

A genus of the Pentandria Monogynia class.

“ There is a grace in wild variety
Surpassing rule and order.”

THE Virginian creeper, when allowed to climb the trunks of forest trees in ornamental plantations, adds greatly to the beauty of such scenery, by the ever varying colours of its foliage, from green to yellow and brilliant red. In these situations it forms natural and beautiful wreaths and garlands amongst the boughs of its supporter, where, by the gaiety of its tints, it has the effect of the most lively blossoms. The stalks of this climbing plant are provided by nature with the means of fixing themselves to the bark of trees or the crevices of rocks or walls, by means of little fibres, which insinuate themselves, like those of the common ivy; and it is therefore frequently planted to cover walls and other buildings, particularly as it thrives in confined

situations, and will flourish in the smoke of large towns.

We remember its covering the entire end of a house in Mortimer Street, in London, where rural scenes and rural sounds are so much out of fashion, that the owner, we are told, cut down this American climber to prevent having his house indicted as a nuisance, for harbouring sparrows, whose twittering commenced too early in the morning for these whose evening parties begin at midnight. These little chirping choristers may not think themselves singled out by this persecution, since Handel himself was indicted for calling forth the strains of the organ at too early an hour for the fashionables in that quarter of the town.

We cannot forbear relating, in this place, the singular devastation that was committed on some rural scenery, in a street leading out of the Strand, where the wife of a respectable tradesman, who never passed her

— — — — — brick-wall bounds

To range the fields and treat *her* lungs with air,

Yet *felt* the burning instinct — over head,"

on the leads of her house contrived to form a grove of myrtles, geraniums, and such other plants as Covent Garden affords. Thus she

managed to peep at nature, without the fear, of fences being broken by neighbouring cattle, or trampling sportsmen, treading down her fairest hopes, which, however, were soon spoiled by a host of enemies as ravenous as unexpected. The adjoining house was occupied by a furrier, who, finding his muffs and tippets required air, placed them on his leads also, where the heat of the sun soon gave birth to numerous insects, which, escaping from the eggs concealed in the hairs of the fur, flew to the new created Babylonian garden, and there fixed themselves, until every leaf was destroyed; and it was only by the interference of mutual friends and neighbours, that damages were not sought in the Court of King's Bench.

The Virginian creeper grows naturally in all the northern parts of America. It was first brought from Canada into Europe, but at what exact period is uncertain. Parkinson is the oldest writer who notices this plant; he mentions it in 1629, under the title of Virginia Vine; but observes, that it would be more proper to call it Virginia Ivy, which it resembles nearer than the vine; but M. Jussieu is of opinion that it should be removed to the genus *Vitis* or Vine.

The flowers of this plant are of a greenish

colour, hanging in little bunches, and are succeeded by berries of a black hue. This fruit is used as a purgative and emetic, and the leaves form a caustic for drawing issues and keeping them open. This plant may be raised from seed, and is easily increased by layers or cuttings, and it will grow in any aspect or soil.

WALNUT-TREE.—See *Pomarium Britannicum*,

VIRGIN'S BOWER. — CLEMATIS.

*Natural order, Multisiliqua. Ranunculaceæ,
Juss. A genus of the Polyandria Polygynia
class.*

“ 'Tis a bower of Arcadian sweets.”

“ Where odorous plants in evening fair,
Breathe all around ambrosial air.” GREEN.

THE sweet-scented virgin's bower, *Clematis flammula*, whose clusters of small white flowers shed such an agreeable fragrance over our morning and evening walks, during the months of July, August, and September, is a native of the south of France, Italy, the Grisons, &c., and was cultivated in this country by Gerard, previous to 1596. Yet it is not become so common as might have been expected from its easy propagation, hardy nature, and above all, from its delightful perfume, which greatly resembles that of the hawthorn, excepting that it is not so powerful, and therefore more agreeable to people in general, being less offensive to the head. This climbing or creeping plant

is a proper ornament for rustic porches or arbours, and it may also be planted so as to climb the trunks of laburnums and other trees in the shrubbery; thus giving the grace of a second flowering. We observed the sweet-scented clematis planted in the flower parterres of the royal gardens in Paris, where it was tied to a stake and kept cut as a shrub, by which means it was very ornamental, being covered with white blossoms, and at the same time throwing the fragrance of May over the whole gardens. Great quantities of these plants, when in blossom, are also brought to the flower market of that city, in pots, and meet with a ready sale.

The name of Clematis is derived from the Greek κλήμα, because these plants climb trees, by means of their pliant twigs, like the vine. The sweet-scented species is distinguished by the trivial name of *Flammula*, on account of the burning sensation the leaves give to the tongue.

The purple virgin's bower, *Clematis viticella*, is a native of the woods of Spain and Italy, and was also one of the plants which Gerard cultivated in his garden at Holborn, in the times of good Queen Bess. He calls it the Ladies' Bower; "from its aptness to make bowers or arbours in gardens." But this

species was previously propagated in England by Mr. Hugh Morgan, as early as 1569. The flowers of this kind of clematis are of a bell shape, and generally of a dingy blue or purple colour, although there is a variety of it, with red flowers, as also one with double blossoms. The long-flowered virgin's bower, *Clematis cylindria*, was introduced from North America in the year 1802, by Messrs. Gordon and Thompson, nurserymen, at Mile-End. This species is much more ornamental than the former one, as the flower-petals are of a fine violet colour, edged with white, and white in the inside. The yellow-flowered virgin's bower, *Clematis ochroleuca*, is also a native of North America, where it was observed by Bannister, and cultivated in this country in 1767, by Mr. James Gordon. This species flowers in June and July.

The best mode of propagating these plants, is by laying down the branches in the beginning of July, soon after they have made their first shoots, for it is these young branches of the same year, which take root most freely. When increased by cuttings, they should be planted in March, in pots filled with good earth, and plunged into a moderate hot-bed, shaded from the sun, and watered two or three times a week, and in less than two

months they will have taken root, when they should be gradually inured to the open air.

These plants all require some support, and an open sunny situation, and never appear to so much advantage as when climbing the trunks of trees, or covering alcoves or thatched cottages.

The Hortus Kewensis enumerates sixteen different species of these plants, besides several varieties, all of which are hardy enough to bear the severity of our winters, excepting one from Japan and one from Minorca, that require the greenhouse, and one from Jamaica requiring the stove.

WILLOW.—SALIX.

*Natural order, Amentaceæ. A genus of the
Diacia Diandria class.*

“ In which the willows dip
Their pendent boughs, stooping as if to drink.”
COWPER.

“ Thus o’er our streams do eastern willows lean
In pensive guise; whose grief-inspiring shade,
Love has to melancholy sacred made.” DELILLE.

“ To the brook and the willow that heard him complain,
Ah willow ! willow !
Poor Colin went weeping and told them his pain.”
ROWE.

THE weeping willow, *Salix Babylonica*, so much admired when waving its long and slender pendulous branches over our lakes and rivers, is a native of eastern countries, and grew anciently by the waters of Babylon, as its trivial name indicates. It was on this tree that the unhappy Israelites hung their harps, and bemoaned their beloved Jerusalem, during their captivity, and which is so

pathetically expressed in the following beautiful lines :

“ By the rivers of Babylon, there we sat down, yea, we wept, when we remembered Zion. .

We hanged our harps upon the willows in the midst thereof.” *Psalm cxxxvii.*

The Jews were commanded by the Levitical laws, to keep the festival of the new moon after the harvest, in which they were directed to hold a branch of the willow of the brooks in their hands, singing Hosannah.*

We still retain the appellation of the harvest moon in our almanacks, but our praises and thanksgivings for the bounteous gifts of nature are but feebly and rarely sung in these days of refinement.

. The religion of the ancients consisted greatly in national and public praise and thanksgiving, which must appear on reflection equally desirable with public prayer, since we know not what to ask for our good ; but we may always be assured that our joyful expressions of gratitude must be acceptable to the Giver of all good things.

It is related, that Alexander the Great, whilst at Babylon, amused himself in a boat on the waters of the Euphrates, which ran through that city ; and that as the boat passed

beneath a willow which hung over the river, his crown was taken from his head by the projecting branches, and fell into the water, but was immediately recovered by an expert diver, who happened to be in attendance. This event was considered as the omen of his premature dissolution.

Delille says, in a note in "*L'homme des Champs*," "Tournefort is the first that made us acquainted with the willow with branches inclined, called the weeping willow. It is even probable that Europe is indebted to this naturalist for it."

It has been stated that we owe the weeping willow to Pope; and this idea was strengthened by a paragraph which appeared in the *St. James's Chronicle*, August 25 to 27, 1801, that says, "The famous and admired weeping willow, planted by Pope, which has lately been felled to the ground, came from Spain, enclosing a present to the late Lady Suffolk. Mr. Pope was in company when the covering was taken off; he observed, that the pieces of stick appeared as if they had some vegetation, and added, "perhaps they may produce something we have not in England." Under this idea he planted it in his garden, and it produced the willow-tree that has given birth to so many others."

Madame de Genlis mentions, in a little work on natural history, that the two finest weeping willows in England, are at Twickenham, in the garden of Pope, standing on a terrace that is watered by the Thames. These two willows, she adds, are equally remarkable for their bulk, and for the surprising extent of their branches, which form two large groves.

The Hortus Kewensis informs us that the Babylonian willow was planted in this country as early as 1692, at which time Pope was only four years of age; therefore those planted by him at Twickenham, could not have been the first known in this country.

The celebrated Dr. Samuel Johnson planted a willow of this species in his childhood, near the cathedral in the city of Litchfield, his native place, which has long been shown as a curiosity, both on account of its enormous size, and the popularity of this writer.

The very name of this elegant tree is sufficient to inspire a degree of sadness which is not lessened by the numerous melancholy sonnets that have been written on it, until we scarcely behold a weeping willow without expecting to meet with a sepulchral monument of "Poor Mary Anne," or some other slighted lover, over whom this emblem of

grief waves its dishevelled hair in silent sorrow. Lovers formerly made their garlands of this willow, the branches of which are very pliable.

This species of willow grows spontaneously on the coast of Persia, and is planted every where in the Chersonesus Taurica. It is also frequent in China, where we may suppose it is a favourite tree, from the frequent representations the people give of it on their China ware. It is also cultivated in Cochinchina.

The weeping willow is pictured in a view of the village of Tonnau, drawn by John Nievehoff, July 3. 1655, in his way to Peking, with the embassy which the Dutch sent to the Emperor of China in that and the following year; but there is no name given, or particular remark made on this tree: he merely says, “ This empire doth also very much abound with trees; not only such as grow in Europe, but several others of a more strange nature, not known in our parts of the world.”

Of all the aquatic trees the weeping willow is the most ornamental, when planted in its natural situation. It gives a kind of polish to the scenery, where either natural or artificial lakes are admitted, and, when accompanied by a clump of three or four poplars, its

effect is greatly heightened by the contrast. This tree is not calculated for what is termed rural or woodland scenery; its softness of tint, and peculiar gracefulness of growth, seem to make it a proper plant for refined or embellished landscapes. It is an excellent tree to plant by the side of fish-ponds, as it is generally found to lean over the water, and by this means afford shade to the fishes, which are frequently killed by the rays of the sun in hot summers, where there is no shade on the water; and the smaller the pool, the greater is the necessity to give it shade. This tree also affords an agreeable canopy to the angler.

“ Beneath the quivering shade,
When cooling vapours breathe along the mead,
The patient fisher takes his silent stand,
Intent, his angle trembling in his hand:
With looks unmoved, he hopes the scaly breed,
And eyes the dancing cork and bending reed.
Our plenteous streams a various race supply,
The bright-eyed perch with fins of Tyrian dye,
The silver eel, in shining volumes roll'd,
The yellow carp, in scales bedopp'd with gold,
Swift trouts, diversified with crimson stains,
And pikes, the tyrants of the watery plains.” POPE.

The weeping willow is one of the first trees that gives out its leaves in the spring, and it retains them longer than most other deciduous trees. We have frequently seen it in the depth

of winter exhibiting its graceful branches, covered with hoary frost, forming the most magnificent spectacle imaginable, at one moment reminding us of a tree sculptured from the purest alabaster, and the next representing a superb chandelier of glass.

The French distinguish this species of willow by the name of the Grand Signior's or Babylonian Parasol.

The generic name of the willow, *Salix*, is derived from *salire* (to leap), because, as the herbalists observe, "It groweth with that speed that it seemeth to leap;" and the Greeks called it ἰτέα, for the same reason—*παρὰ τὴν ἰέναι*.

The latest edition of the Hortus Kewensis enumerates sixty-five distinct species of willow; and the British Botanist of 1820 names fifty-six species of this plant, as natives of our soil.

In the terribly superstitious time of the Druids, idols were formed of the branches of these trees, which were woven into baskets, of sufficient size to hold a great number of persons, who were consumed together, for the purpose of impressing the ignorant with awe, that they might with greater facility continue their horrid impositions.

Herodotus tells us, that the Scythians had

diviners, who made their conjurations and divinations with wands of willow. We have already so frequently noticed the religious cheats and the abominable rites of the Pagan priests, that we have nothing left but to express our gratitude that we are permitted to live in the blessed days of Christianity.

“Willows in twigs are fruitful.” VIRGIL.

“On willow twigs employ thy weaving care.” *Ib.*

The pliant twigs of these trees appear to have been employed for domestic purposes from the earliest ages. The shields of the ancients were woven with wicker-work, and covered with the hides of oxen.

“And bending osiers into baskets weaved.” VIRGIL.

The ancient Britons served up their meats in osier baskets and dishes; and so expert were they in this kind of wicker-work, that their baskets were objects of great admiration to the Romans, which we learn from the following epigram of Martial:

*Barbara depictis veni bascauda Britannis,
Sed me jam mirant dicere Roma suam.*

Lib. xiv. Ep. 99.

“A basket I, by painted Britons wrought,
And now to Rome’s imperial city brought.”

Osier baskets were the first manufactured articles that were exported from these king-

doms. These baskets were of very elegant workmanship, and bore a high price in Italy. Juvenal notices them among the extravagant and expensive furniture of the Roman tables in his time.

Addē et bascaudas, et mille cscaria. Sat. xii. v. 46.

“Add baskets, and a thousand other dishes.”

In early days, the Britons, as well as the inhabitants of other countries, for want of proper tools for sawing large trees into planks, formed their vessels or boat of osiers, and the flexible branches of trees interwoven as close as possible, and covered with skins. *

It was in such slender vessels as these, probably, that some bold adventurers first launched out from the nearest coast of Gaul, and passing the narrow sea that flows between, landed in an auspicious moment on the shores of this inviting island; and being followed by others of both sexes in their successful attempt, began to people the country which they had discovered. This much at least is certain, from the concurring testimony of many authors, that the most ancient Britons made use of boats of this construction for several ages.

*. Cæs. de Bel. Civ. l. i. c. 54

Pliny tells us, that Timæus, a very ancient historian, whose works are now lost, had related that the people of Britain used to sail to an island, at the distance of six days' sailing, in boats made of wattles, and covered with skins. These kinds of boats were still in use here in Cæsar's time, who acquaints us that he transported his army over a river in Spain, in boats made in imitation of those that he had seen in Britain, which he thus describes: "Their keels and ribs were made of slender pieces of wood, and their bodies woven with wattles, and covered with skins."

These ancient British vessels are also described by Lucan and Festus Avienus:

"Primum cana salix, madefacto vimine, parum
 Texitur in puppim, casoque inducta juvenco
 Victoris patiens, tumidum circumnatat amnem.
 Sic Venetus stagnante Pado, fusoque Britannus,
 Navigat oceano." LUC. PHARS.

———— "Rei ad miraculum
 Navigia junctis semper aptant pellibus,
 Curioque vastum sæpi percurrunt salum."
FEST. AVIENUS in Oris. Marit.

Solinus gives the same account of the boats in which the ancient inhabitants of Ireland and Caledonia used to pass the sea which divides these two countries: "The sea which flows between Britain and Ireland, is so unquiet

and stormy, that it is only navigable in summer, when the people of these countries pass and repass it in small boats made of wattles, and covered carefully with hides of oxen."

Gibbon observes, that "if the fact were not established by the most unquestionable evidence, we should appear to abuse the credulity of our readers by the description of the vessels in which the Saxon pirates ventured to sport in the waves of the German Ocean, the British Channel, and the Bay of Biscay. The keel of their large flat-bottomed boats was formed of light timber, but the sides and upper works consisted only of wicker, with a covering of strong hides. These boats drew so little water, that they could easily proceed fourscore or an hundred miles up the great rivers; their weight was so inconsiderable, that they were transported on waggons from one river to another; and the pirates who had entered the mouth of the Seine, or the Rhine, might descend with the rapid stream of the Rhone into the Mediterranean."

In Herodotus* we meet with a curious description of the vessels in which the Armenians navigated the Euphrates. These vessels were quite flat and round like a shield, composed of willow, covered with hides or skins.

They were laden generally with palm wine and worked by two men, and on board there was carried one live ass or more according to the size of the raft, which was various. When these vessels arrived at Babylon, which was always their destination, the owners, after having disposed of their cargoes, put up the wicker-work of their boats to sale, and loading the asses they had brought with them with the hides, returned again to their country by land, to perform a similar journey in a similar manner. The impetuosity of the current of the Euphrates made it impossible for them to return by water.

The willow also formed a defence from the unhallowed tread of man over the mouldering corpse of his friends and ancestors.

“ Those graves with bending osier bound,
That nameless heavè the crumbled ground.”

PARNELL.

The uses of the willow are perhaps equal to those of any other species of our native trees. Scopoli observes that it supports the banks of rivers, dries marshy soil, supplies bands or withes, feeds a great variety of insects, rejoices the bees, yields abundance of fire-wood, affords nourishment to cattle with its leaves, and yields a succedaneum to Je-

suit's bark. To which the venerable Evelyn adds, "all kinds of basket work; pill-boxes, cart saddle trees, gunstocks, and half pikes, harrows, shoemaker's lasts, heels, clogs for pattens, forks, rakes, perches, rafters for hovels, ladders, poles for hop vines, hurdles, sieves, lattices for the turner in making tops, platters, small casks and vessels, especially to preserve verjuice in; pales, dorsers, fruit baskets, cans, hives, trenchers, trays," &c. &c., to which we may add cricket bats, and numerous other articles where lightness and toughness of wood are desirable.

The wood of the willow although tender, has the property of whetting knives like a whetstone; therefore all knife boards should be formed of this tree in preference to any other.

The bark of the common white willow will tan leather, and dye yarn of a cinnamon colour. The Arabs distil their celebrated *calaf* water from the catkins of any species in which they are fragrant. They use this water as a cooling beverage, or as a febrifuge. In Persia they obtain one of their most esteemed perfumes from the flowers of several kinds of willow.

The downy substance that covers the seeds

of several species of willow, particularly the bay-leaved, *Salix pentandra*, forms the soft and warm lining of the nests of the goldfinch and some other birds, from whom we have learnt to collect it as a substitute for cotton in stuffing mattresses and chair cushions, &c., and when mixed with a third part of cotton, it has been advantageously used for candle-wick and many other similar purposes.

The Germans collect it for the purpose of making wadding, so much used in ladies winter dresses, and a useful ordinary paper may be formed of this cottony substance.

The dry husks of these trees remaining after the flowers and seeds are fallen, are wholesome as food, people in times of famine having lived upon them boiled in water.

Some of the kinds of willow, particularly the white willow, will grow to large and lofty trees; they have been seen nine feet in diameter, or twenty-seven feet in circumference, and when perfectly hollow, will give vigorous shoots and flowers by means of the bark. The crack willow, *Salix fragilis*, grows to be one of the largest trees of this genus.

The osier, *Salix viminalis*, is much cultivated in osierholts, for making hoops and the larger sorts of baskets, hampers, cradles, bird-cages, &c. Putchesons and weels for catching eels

are formed from the twigs of this tree, whilst its trunk prevents the banks of rivers from being washed away by the force of the current.

The basket osier, *Salix fissa*, is principally propagated in the fens, and is preferred to all other willows or osiers for basket-work.

The great round-leaved sallow, *Salix caprea*, delights in a dry rather than a moist soil; it is generally used for hurdles, and the trunk is admirable for many purposes with the turner. This tree is known by its round or rather oval leaves, which are rough and waved, indented at the top and woolly underneath. The catkins are very large, and white, and appear early in the spring, on which account they are much resorted to by the bees, on their first coming out of their hives at that early season, when few other flowers are expanded, and the quantities of pollen which the numerous anthers of this plant give, enable them to obtain both food and wax in abundance.

All the sorts of willows are easily propagated by planting cuttings or sets either in the spring or autumn, but the spring is found to be the most favourable time for this purpose; and as they are quick growing trees, they should oftener invite the attention of those

who have lands suitable to their cultivation; for as they make almost immediate profit, it must be desirable to attend to their propagation, particularly in those tracts of lands fit only for this purpose, and which at present produce little to the owners; but if planted with osiers and willows of different kinds, would turn to as good account as the best corn land. Martyn says the best time for planting these cuttings in the osier grounds is February, for if they are planted sooner, they are apt to peel, if it proves hard frost, which greatly injures them. These plants are cut every year, and if the soil be suitable they will produce a great crop, so that the yearly produce of one acre has often been sold for fifteen pounds, but ten pounds is a common price, which at the present time is much better than corn land can be made to pay.

In extensive shrubberies several kinds of willows may be admitted, both for ornament and variety, particularly the triandrous, or long-leaved, three-stamened willow, *Salix triandra*, which gives out such abundance of catkins in the months of April and May; which, by their bright yellow colour greatly enliven the scene, and at the same time render the air agreeable, by the scent which they exhale.

The male tree should be selected for this purpose, because the female tree quickly sheds its catkins.

The silver-leaved willow, *alba sericea*, should be planted for the contrast it forms with dark evergreen shrubs, and the rosemary-leaved species may also be intermixed with great advantage in many situations.

These species of trees are very interesting to the botanist. In the Linnean system they are ranged in the 22d class, called *Diœcia*, from the Greek, meaning two houses, because this class includes the unisexual plants, viz. the male and female flowers being produced on different roots or distinct trees. This class, therefore, in some respects, assimilates the animal and vegetable economy; for in the plants which are perfectly diœcious, it is known that the female plants produce no fertile seed, without the proximity of the male plant when in flower. For some curious instances of this fact we refer the reader to our history of the date-bearing palm-tree in the Pomarium Britannicum.

The galls on the leaves of willows are usually of a roundish or oblong figure, and equally protuberant on each side of the leaf, and of a pale green at first; but afterwards of a yellowish, and finally of a red colour.

When these galls are opened, there is found in them a worm, resembling a caterpillar in figure, with about twenty legs. This creature, when the gall is young, is blue; it afterwards becomes greenish; and finally, when the gall becomes red, it is white. This insect seems to eat in its prison more voraciously than any other gall insect whatever; for while the gall increases in size, it becomes also thinner in every part, so that the creature, at the proper time, has but little difficulty to get out. When the time of the last change of this insect draws nigh, it leaves the tree, and descends to the earth, where it makes its way into a proper place, and then becomes a nymph, out of which at a proper time issues a four-winged fly, which in its turn lodges its eggs in the leaves of the willow, from whence spring thousands of insects, which become the food of birds, who, in their turn are devoured by man. Thus the willow assists to convert particles of earth and mineral substances, first into vegetable, and then into animal substance, for the subsistence and nourishment of the human frame, which in its turn is swallowed by the hungry grave.

“Where toil and poverty repose.”

YEW-TREE. — TAXUS.

*Natural order, Coniferæ. A genus of the Diœcia
Monadelphîa class.*

“ The sacred yew, so fear’d in war.”

“ And the tougher yew
Receiv’s the bending figure of a bow.” VIRGIL.

“ Th’ elastic yew, whose distant wound
With England’s rivals heap’d the ground.”

ON beholding this sable evergreen, the mind is naturally carried back to the times of bows and arrows, when the yew was as celebrated for causing death and devastation in the field of battle, as the modern engine is at present, which levels rank and file by the dreadful balls that are vomited from its sulphureous mouth.

The Persians, who in the Scripture are called Elamites, were the most expert archers in the world; and Homer thus speaks of the ancient inhabitants of Crète,

“ Cydonians, dreadful with the bended yew.”

Virgil notices the elasticity of this wood in the *Aeneis*.

“ This foul reproach Ascanius could not hear
With patience, nor a vow'd revenge forbear;
At the full stretch of both his hands, he drew,
And almost join'd, the horns of the tough yew.”

Of all the European nations, the English are generally allowed to have been the best archers;

“ Skill'd in fight, their crooked bows they bend :”

and to their dexterity in the use of this weapon, is ascribed many signal victories, particularly those of Cressy, Poitiers, and Agincourt, over the French; and that of Hamildon over the Scots. And long before these famous battles were fought, Henry the Second had succeeded in the enterprise of conquering Ireland, chiefly by the use of the long bow, with which the Irish were at that period (1172) entirely unacquainted.

The reputation of the English as skilful archers does not pass unnoticed by Tasso;

“ Maggior alquanto è lo squadron Britanno :
Guglielmo il regge, al re minor figliuolo,
Sono gl' *Inglese sagittarj*.”

Canto I. Stanza 44.

The yew, however, proved fatal to three of our kings. Harold was killed by an arrow at the battle of Hastings, in Sussex. William the Second was slain by an arrow in the New Forest, Hampshire ;

“ Lo, Rufus, tugging at the deadly dart,
Bleeds in the forest like a wounded hart.” POPE.

and Richard Cœur de Lion received his death wound from the same weapon, at the siege of the castle of Chalus, near Limoges, in the department of Upper Vienne, in France.

The Cheshire men are supposed to have been the most expert in the exercise of the bow, as it is related that in the year 1397, in the reign of Richard the Second, Westminster-hall being in an extremely ruinous state, that monarch built a temporary room for his parliament, formed with wood and covered with tiles. It was open on all sides, that the constituents might see every thing that was said and done ; and to secure freedom of debate, he surrounded the house with four thousand Cheshire archers, with bows bent and arrows knocked ready to shoot. This fully answered the intent, for every sacrifice was made to the royal pleasure.

In Switzerland, the yew-tree is only found on the Hâtemberg, and the inhabitants of these mountains hold it in great veneration, because formerly they made their cross-bows and wooden lances from it, and then it was forbidden under the most severe penalties, to cut it for other purposes. These simple mountaineers still call it William's tree, in memory of their expert archer William Tell.

Various have been the reasons assigned for planting these trees in our churchyards. The most probable cause seems to us to have originated in the scarcity of this wood, which would naturally be the case as agriculture spread itself over the country, for no farmer could be safe in turning his cattle into fields, where this baleful evergreen offered its poisonous foliage to their bite. And as it appeared necessary to retain this tree for the sake of its assistance in warfare, it is probable that every parish was obliged to plant a certain number of them in their respective churchyards, where they would be secure from the cattle; for had it been merely planted there for the purpose of decorating our churches at Christmas and other festival days, we should have seen the holly planted for the same purpose, which is still more in use for that purpose.

From what we learn respecting the age of these trees in general, they appear to have been planted about the time of the conquest, 1066; and the same custom seems to have been attended to in Normandy at that period, as Bernardin de Saint Pierre says, "I have seen in Lower Normandy, in a village church-yard, an aged yew planted in the time of William the Conqueror; it is still crowned with verdure, though its trunk cavernous, and through and through to the day, resembles the staves of an old cask."

That our ancestors relied on the yew-tree as a basis of their strength, in the same manner as we now rest on the oak for defence, is too well authenticated to admit a doubt. "Of it," says Mr. Gilpin, "The old English yeoman made his long-bow, which he vaunted, nobody but an Englishman could bend. In shooting he did not, as in other nations, keep his left hand steady, and draw his bow with his right: but keeping his right at rest upon the nerve he pressed the whole weight of his body into the horns of his bow. Hence arose the English phrase of *bending a bow*; and the French of *drawing one*."

In the days of archery, England could not supply its bowyers with a sufficient quantity of yew, and they were obliged, by statute to

import staves of it for making bows, and sometimes at very high prices. All Venetian ships with every butt of Malmsey or Tyre wine, were to import ten bow staves, as the price had risen from two to eight pounds per hundred.

By one of the ancient statutes, a bow of foreign yew may be sold for no more than six shillings.

By the fifth of Edward the Fourth, it was directed that every Englishman in Ireland, and Irishman dwelling in with Englishmen, shall have an English bow of his own height made of yew, wych, hazel, ash, or auburn (supposed to be alder). But “as for brasell (says Roger Ascham) elme, wych, and ashe, experience doth prove them to be but mean for bowes, and so to conclude, ewe of all other things is that, whereof perfite shootinge would have a bowe made.”

The thirty-third of Henry Eighth, c. 9., recites the great price of yew bows made of elke (probably elbe) yew; and reduces it to three shillings and fourpence.

From the end, however, of Henry the Eighth's time, archery seems to have been chiefly considered as a pastime. Yet by the eighth of Elizabeth, z. 10., the price of bows is regulated; and thirteenth of Elizabeth,

c. 14., enacts, that bow, staves shall be brought into the realm from the Hanse towns and the eastward.

The comparative value of a yew with other trees, in former times, may be seen from the following table, taken from the ancient laws of Wales.

A consecrated yew, its value is a pound.

An oak, its value is six score pence.

A mistletoe branch, its value is three score pence.

Thirty pence is the value of every principal branch in the oak.

Three score pence is the value of every sweet apple-tree.

Thirty pence is the value of a sour apple-tree.

Fifteen pence is the value of a wood yew-tree.

Seven pence half-penny is the value of a thorn-tree.

Four pence is the value of every tree after that.

The great value set upon a consecrated yew, in the above table, in comparison with a common tree of the same kind, induces me, says Mr. Martyn, among other reasons, to think, that the yew was commonly planted in churchyards, rather from motives of superstition, than on account of its utility in mak-

ing bows, as many have supposed, for a single tree would have afforded a very scanty supply for this purpose. We might have been induced to have formed the same conclusion, had we found but one tree of this kind in each churchyard, but even at the present time it is not unfrequent to see several. In the churchyard at Aberystwith there are eleven yew-trees, the largest of which is twenty-four feet in circumference; and in Manskilad churchyard there are twelve fine yew-trees; which proves that it was not confined to the planting of a single tree.

It is very natural, that the yew should be considered a funeral tree from its having so long occupied a place in our cemeteries, and our fore-fathers seem to have been particularly careful in preserving this tree sacred, the branches of which they carried in solemn procession to the grave, and afterwards deposited under the bodies of their departed friends..

“ Let’s talk of graves, of worms, and epitaphs;
Make dust our paper, and with rainy eyes,
Write sorrow on the bosom of the earth,
Let’s choose executors, and talk of wills.”

SHAKESPEARE.

“ Now from yon black and funeral yew,
That bathes the charnel house with dew.”

PARNELL.

Our learned Ray says, that our ancestors planted the yew in churchyards, because it was an evergreen tree, as a symbol of that immortality which they hoped and expected for the persons there deposited. For the same reason this and other evergreen trees are even yet carried in funerals, and thrown into the grave with the corpse in some parts of England and Wales. But we are persuaded that this custom was taken from the Romans, and may be traced back even before their existence, or before the doctrine of the immortality of the soul was preached or made known. The custom of carrying fragrant herbs and branches of such shrubs or trees as would prevent infection, is of great antiquity, as well as considerable utility; and of this ancient custom we have frequently spoken in our history of cultivated vegetables; and Statius tells us, that garlands of yew were usually carried at funerals.

“ Beneath —, that yew-tree’s shade,
Where heaves the turf in many a mouldering heap,
Each in his narrow cell for ever laid,
The rude forefathers of the hamlet sleep.” GRAY.

—— “ The grave, dread thing,
Men shiver when thou’rt named,

Well do I know thee by thy trusty yew,

Cheerless, unsocial plant ! that lov'st to dwell
 Midst skulls and coffins, epitaphs and worms ;
 Where light heel'd ghosts, and visionary shades
 Beneath the wan cold moon (as fame reports)
 Embodied thick, perform their mystic rounds.
 No other merriment, dull tree ! is thine." BLAIR.

The 'dark' foliage of the yew-tree seems well calculated to give a solemnity to the village churchyard, and its wide extending branches offer their shade to the rustic Sunday politicians, until the treble bell announces the time of prayer.

" On Sunday, at the old yew-tree,
 Which canopies the churchyard stile,
 Forced from his master's company,
 The faithful Trim would mope awhile ;
 For then his master's only care
 Was the loud psalm, or fervent prayer ;
 And, 'till the throng the church-yard path retrod,
 The shepherd's patient guard lay silent on the sod.
 MRS. M. ROBINSON.

All nations agree in making this tree the emblem of sorrow, and our poets are not backward in condemning and adding to the revolting character of a tree, whose wood was dedicated to war, and its shade to the dead.

— " Where sheds the sickly yew
 O'er many a mouldering bone its nightly dew."

DARWIN.

The baleful influence of this tree has been greatly exaggerated, and its beauties transformed into objects of disgust and terror. It is unjustly accused of destroying all vegetation by its blast, whilst its beautiful berries have been compared to drops of blood.

The yew is not more remarkable for its toughness and elasticity, than for the fine colour and beautiful grain of its wood.

“ Whilst the distinguish’d yew is ever seen,
Unchanged his branch, and permanent his green.”

This tree is still to be found in some of our old gardens, and it is common in most of the gardens in Holland, where the art of ancient clipping and cutting is still preserved in all its gloomy stateliness and formal regularity. Vases, pyramids, or globes of yew, are the finish of each angle, whilst in other places, monstrous birds, dragons, and bears, are shaped and modelled out of these trees, as if instead of showing its natural beauties, it was intended to represent the ancient guardian of the garden as recommended by Columella of old, who says,

— “ Chuse the trunk of some huge antient tree;
Rough hew it, use no art, Priapus make.
Him, in the middle of the garden place.”

'And to him, to its guardian, homage pay,
That from your ripening fruits he may deter
The plundering boy; and with his threatening scythe,
The robber from intended rapine keep." Lib. 10.

That the yew-leaves are a deadly poison is now too well known to require our reciting the opinions of Dioscorides, Galen, Pliny, and other ancient authors; and that its effects are as baneful to man as they are to beasts, we feel it a duty to state, since many fatal accidents have arisen from its juice being administered to children for the purpose of destroying worms. In an age when the affluent have so munificently established dispensaries throughout the kingdom for distributing medicines to the poor, there can be no excuse for the ignorant dabbling with dangerous herbs, and they should be as particularly cautioned to avoid hungry quacks, as one would the advice of needy lawyers.

Unfortunately the quacks try their arts on the simple, and the attornies on the needy, Johnson says truly, "

" Their ambush here relentless ruffians lay,
And here the fell attorney prowls for prey."

The profession of medicine has always abounded in men of the greatest liberality and philanthropy.

" Patient in all their trials, they sustain
 The starts of passion, the reproach of pain;
 With hearts affected, but with looks serene,
 Intent they wait through all the solemn scene;
 Glad if a hope should rise from nature's strife,
 To aid their skill and save the lingering life;
 But this must virtue's generous effort be,
 And springs from nobler motives than a fee." CRABBE.

As few people would in this age be able to plead ignorance of the poisonous nature of yew-leaves, it is a doubt whether their administering this fatal juice to children against worms would not subject them to a trial for murder, in case of accident.

Julius Cæsar, in his Commentaries, says that Cativulces, king of the Eburones, poisoned himself with the juice of the yew. Aubrey relates a case of two women who died from a drink of it; and Dr. Percival of Manchester, mentions another of three children, who were killed by a spoonful of the green leaves, which was given them for worms; they died without agony, or any of the usual symptoms of vegetable poisons. The same quantity of the dried leaves had been given the day before, without effect.

A clergyman, who was curate in Sussex, informed me (says Dr. Martyn), that a young lady and her servant, his parishioners, being seized with an ague, were advised to take a

decoction of rue, which they unhappily mistaking for yew, sent to the churchyard, where a large old tree grew, and gathered a quantity of the leaves, of which they made a decoction, and drank it upon going to bed. The next morning they were both found dead. This was Sunday; on the Thursday following, the clergyman was called upon to bury them; he performed the office on the servant, but the young lady had so fine a bloom on her countenance, that they entertained hopes of her being in a state of suspended animation, and accordingly tried the experiments usual in such cases, but without success; they determined, however, not to bury her at that time, but kept her until the ensuing Saturday, and even then the corpse remained totally unchanged. What made it more remarkable was, that the accident happened in November, and the weather was of that damp murky kind in which flesh keeps the worst.

We shall point out the pernicious effects of yew on animals in general, that those who possess this tree may take the proper precautions to keep their cattle from it; and we shall also advise such as have yew-hedges in their gardens, to direct their gardeners to burn or bury the clippings, for when thrown carelessly away, serious accidents have frequently

occurred by their having been eaten by some animal. In August 1822, a valuable riding horse belonging to E. Nicholas, Esq., of Ringmer, in Sussex, was turned into a close where some sprigs of yew-tree (which had been clipped off in the course of the day by the gardener,) were thrown with other rubbish. The horse ate of the yew-tree clippings, and afterwards drank at a pond, which caused the animals almost immediate death. . . .

It frequently happens that due caution is not taken to secure these trees, because we do not recollect their having been the cause of accident, and we observe generally an antipathy in animals to them; yet these very animals may, under various circumstances, be induced to eat of it, when least expected, as happened at Chelmsford, in Kent, in January 1823; when Messrs. Woodward and Co. of that town, turned three of their valuable horses into a small close, adjoining which was a yew-tree. The snow then lay so thick upon the ground as to hide every other vegetable; the yew-tree therefore, by its tempting verdure, became irresistible. In about three hours from the time that the horses were turned out in perfect health, and full of play, two of them were found dead. Veterinary surgeons were sent for, who soon discovered that these

animals had eaten of the poisonous tree, and a great quantity of it was found in their stomachs. It appeared that these horses had died without even a struggle.

A filly nine months old, which had been turned in at the same time, although somewhat affected, was saved by the prompt administration of proper antidotes.

Martyn says, in his edition of Miller, "the twigs and leaves of yew, eaten in a very small quantity, are certain death to horses and cows, and that in a few minutes. A horse tied to a yew-hedge, or to a faggot-stack of dead yew, shall be found dead before the owner can be aware that any danger is at hand: the writer has been several times a sorrowful witness to losses of this kind among his friends; and in the isle of Ely had once the mortification to see nine young steers or bullocks of his own all lying dead in an heap, from browsing a little on an hedge of yew, in an old garden, into which they had broken in snowy weather. Even the clippings of a yew-hedge have destroyed a whole dairy of cows; when thrown inadvertently into a yard."

Linnaeus says, horses and cows refuse the yew, but sheep and goats eat it with impunity; but in this instance the learned botanist is in error, at least as far as relates to sheep:

Some years back Mr. Stubbs, a farmer at Lancing, near Worthing, bought a flock of sheep at a west-country fair, which arriving home late in the evening, were turned into a little grass court at the front of his house, in which were some yew-hedges, on which the sheep browsed, and in the morning, the greater part of the flock were dead.

It is true that the yew-trees in the sheep-walks on the Surrey hills, and other places, appear to have had their lower branches browsed on by these animals; but it is also true that a sheep is frequently found dead, and that it is passed over without enquiring into the cause.

Martyn mentions a circumstance where six or eight sheep perished by browsing on this tree.

Of the fruit of this tree Theophrastus says, it is eaten by some persons, being sweet, and considered harmless; but Dioscorides says, the berries bring on a dysentery. However, like most other boys, I have frequently eaten them in my youth, without inconvenience; and old Gerard tells us, in his usual quaint style, that when he was young, and went to school, he and divers of his school-fellows did eat their fills of the berries of this tree. In Kensing-

in gardens, the author of this work observed a middle-aged man gathering these berries, and on enquiring for what purpose they were intended, he was informed that they were esteemed good for a cough, and that he, as well as all his family, had frequently eaten quantities of them for that purpose with success.

Mr. White, in his History of Selborne, says, In a yard, in the midst of a street, till very lately grew a middle-sized female yew-tree, which commonly bore great crops of berries. By the high winds usually prevailing about the autumnal equinox, these berries, when ripe, were blown down into the road, where the hogs ate them. It was remarkable, that though barrow hogs and young sows found no inconvenience from this food, yet milch sows often died after such a repast; a circumstance that can be accounted for only by supposing that the latter, being much exhausted and hungry, devoured a larger quantity."

• It is probable that this injury was caused by the swallowing of a great quantity of the black stones which contain the seed, and not from the mucilaginous pulp which surrounds them, as we observe the wasps are very fond of this fruit, and it will be observed that they

touch no poisonous berry, and are generally attracted by the most delicious and nourishing fruits.

The fruit of this tree is of a singular nature, having only that of the *Gualtheria* similar to it, and we are of opinion that it should rather have been called an open drupe than a berry. In its early state it resembles an acorn in miniature, but in the ripe state the cup becomes of a coral colour, and of a glutinous nature, enclosed in an exceeding fine transparent skin, in which the seed is set, covered by a shell that becomes black as it reaches maturity. We have frequently observed this fruit on the trees as late as the middle of November, and we noticed them in full flower on the 20th February 1822, in Kensington gardens.

The flowers come out from the side of the branches in clusters; the male flowers having many stamina, are more conspicuous than the female; these are generally upon different trees, as the class *Diacta*, in which it is placed, denotes; but we meet with some of these trees that have both male and female flowers on the same tree. The pollen of these flowers is said to be injurious to bees.

The yew-tree is still found growing in the wild state in many parts of the Surrey hills.

particularly near Reigate, but more abundantly in the vicinity of Dorking.

Evelyn notices it in the latter place in the time of Charles the Second: he says in his *Silva*, "He that in winter should behold some of our highest hills in Surrey clad with whole woods of these trees, and box, for divers miles in circuit (as those delicious groves of them, belonging to the honourable, my noble friend, the late Sir Adam Brown, of Bechworth-castle), from Box-hill, might, without the least violence to his imagination, easily fancy himself transported into some new or enchanted country; for, if in any spot in England,

Hic ver æssiduum, atque alienis mensibus ætas. VIRGIL.

—— " 'Tis here

Eternal spring and summer all the year."

Mr. Pennant says the yew is to be found wild upon the hills that bound the waters of the Winander, and on the face of many precipices of different places in this kingdom. Mr. Lightfoot says, that it is found here and there in the Highlands of Scotland in a truly wild state; and that at Glenure, near Glencrahan, in Upper Lorn, there are the remains of an old wood of yew.

In some parts of Buckinghamshire, it comes up in great abundance from the berries spontaneously.

In Ireland it was evidently, says Mr. Templeton, very plentiful in former times, being at present common in a fossil state; but it is not now found there, except in cultivation.

Cæsar mentions the yew as very common in Gaul and Germany; and it has been found in North America and Japan.

Its natural situation is in mountainous woods, or more particularly the clefts of high calcareous mountains.

We do not remember a single instance of having met with any young yew-trees being planted in churchyards; and, as many of the old ones are fast approaching to the age of Methusalem, we cannot expect to retain them many ages longer. We shall, therefore, notice some of the most celebrated that are now in existence, and hope soon to be able to record the planting of others; for although we acknowledge there is no actual necessity for these trees occupying a space in the cemetery, yet we have a veneration for the old customs of our ancestors, when they are void of harm, and stripped of superstition; and it must be confessed that no other tree is so well calculated to cast that solemnity over the burial-ground as the tree we have ever been accustomed to behold in this situation. The yew-tree may be safely transplanted at any

moderate age; and although it is not of very quick growth, it arrives at a great bulk, and endures perhaps as long as any tree known.

In the church-yard of Aldworth, in Berkshire, is a yew-tree of prodigious bulk, the trunk measuring nine yards in circumference at upwards of four feet from the ground. The shape is very regular, of an urn-like form; the branches spread to a considerable distance, and rise to a great height. All recollection of its age is entirely lost.

There is one of an extraordinary size at Petersham: and another at Lord Newberry's, in the old palace garden at Richmond, planted three days before the birth of Queen Elizabeth.

Mr. Lyson mentions one in the church-yard at Totteridge, the girth of which, at three feet from the ground, is twenty-six feet: and another in Woodford churchyard, which girths at the same height eleven feet nine inches; and at four feet and a half from the ground, fourteen feet three inches. The spread of its boughs forms a circumference of about one hundred and eighty feet.

Evelyn notices a yew-tree in the church-yard of Crowhurst, in Surry, which was ten yards in compass. "Another in Braburne churchyard, not far from Scotshall, in Kent,

which being fifty-eight feet eleven inches in circumference, will bear near twenty feet in diameter : not to mention the goodly planks, and other considerable pieces of squared and clear timber, which had been hewed and sawn out of some of the arms only torn from it by impetuous winds. Such another monster is also to be seen in Sutton churchyard, near Winchester."

Several fine old trees are to be seen on some sandy rocks about two miles from Withyam, and five from Tunbridge.

Near the church at Hedson, in Bucks, is a fine growing yew-tree, which measures twenty-seven feet in circumference. There are other large trees on the chalk hills of the same county ; and a shady walk of them in the garden of Bradenham-house, near West Wycombe, the branches of which would make excellent bows.

There is a large yew-tree standing in the churchyard at Henfield, in Sussex, whose extending branches cast a thick shade over all the graves in the angle in which it stands. This part of the burial ground is fenced with a holly-hedge, that adds considerably to the gloom of the spot.

The author, when at school in that village, was induced to join five other boys, all about

from ten to twelve years of age, in a frolic that might have created the greatest alarm, and strongly caused a belief that spectres did arise from the grave and walk the earth in embodied shapes. We all slept in the same room; and as the weather was hot, and the moon shining bright, it was proposed that we should descend into the yard for the purpose of getting some water to drink. When there, the beauty of the night tempted one of the party to propose a run. This was instantly agreed to, as well as the leaving our night-clothes in the school-room. The foremost boy bent his course through some fields to the churchyard, where we all followed in a state of nature. It was then proposed that we should show our courage by running round the church separately; and as the moon then shone bright, every object was as visible as in day, excepting under the yew-tree, where we had appointed our resting-place; but whilst dancing over the graves, to reach the place, our attention was suddenly arrested by a figure rising slowly from the earth, which fixed us all to the spot before we reached the shade which darkened the quarter where the spectre stood, and which our first sight magnified into a monster. It became erect and motionless; with eyes fixed on us

who were also in a state bordering on petrification, until the boldest of our party proposed, in a whisper, that we should take hands and go to the spot to see what it was that stood in our way : but the moment we advanced, the object darted from the shade towards the path, where we followed it, and soon recognized the figure of a well-known smuggler, who kept an inn in the village. His fears gave wings to his heels; yet we overtook him, and seizing him by the frock, soon convinced the affrighted Boniface that we had not yet been under ground. He very properly reprimanded us, and told us that he had really imagined that we had come from the graves, but added that such another frolic would be the death of us all. However, if we would go back to the yew-tree, he would give us something to prevent catching cold. Here he produced a small cask of Hollands gin which had been hid in the hedge, and after making a hole with a gimblet, and putting in a quill which he carried with it, we all sucked out of the cask, making him promise never to divulge whom he had seen, and which, for his own sake, he kept sacred. We all returned to our chamber, slept soundly, caught no cold, and never after heard a ghost.

story, but we thought of the Henfield yew-tree.

There is a yew-tree in Martley churchyard, Worcestershire, about twelve yards in circumference. In the churchyard at Ashill, in Somersetshire, are two very large yew-trees, one fifteen feet round, with a vast spread of branches, extending N. and S. fifty-six feet. The other divides into three large trunks just above the ground, but many of the branches are decayed. Two trees are now growing on the hill above Fountain's Abbey, near Ripton, which, in 1770, measured in circumference from thirteen feet to twenty-six feet six inches. At Mill Hill, Hendon, in Middlesex, are four beautiful yew-trees, which, in 1797, measured from seven to nine feet each in circumference.

In the churchyard at Aberystwith, are eleven yew-trees, the largest twenty-four feet, and the smallest eleven and a half in circumference.

Mr. Pennant mentions one in Fontingal churchyard, in the Highlands of Scotland, the ruins of which measured fifty-six feet and a half in circumference.

In Ireland, there is a yew-tree at Mucrus Abbey, having one great stem, two feet in diameter, and fourteen feet high, with a vast

head of branches spreading on every side, and filling the area of the cloisters. Mr. White says, in his history of Selborne, "In the churchyard of this village is a yew-tree, whose aspect bespeaks it to be of a great age: the body is squat, short, and thick; and measures twenty-three feet in the girth, supporting a head of suitable extent to its bulk. This is a male tree, which in the spring sheds clouds of dust, and fills the atmosphere around with its farina. As far as we have been able to observe, the male trees become much larger than the females; and most of the yew-trees in the churchyards of this neighbourhood are males; but this," says Mr. White, "must have been matter of mere accident, since men, when they first planted yews, little dreamed that there were sexes in trees." But we find quite the contrary to this in all the old authors on plants, who speak of male and female trees as familiarly as, at the present time, although they had not defined the principles by which vegetables propagated their species. Pliny observes, that when the male trees of the date-bearing palms are cut down, the female trees become widows, and bear no more fruit.

The Latin name of this tree, *Taxus*, is derived from the Greek *τάξις* (arrangement), because the leaves are arranged on the branches

like the teeth of a comb. Some etymologists consider it to have been derived from *τόξον* (a bow or arrow). Pliny says, that according to some, the "*toxica*," or poison, used for arrows, was called *toxica*, from this tree; but these poisons were so named from *τόξον*. Others derive it from *taxo*, in the sense of *reprehendo*, *culpo*: this being a poisonous tree.

The yew is easily propagated from seed, which should be sown in the autumn, as soon as ripe, without being cleared from the pulp. The soil should be fresh and undunged, and the situation shady; and the seed should be covered about half an inch thick with earth. The bed must be kept free from weeds, and moistened by watering. In two years the plants should be removed into other beds, and planted in rows about a foot asunder.

The yew may likewise be increased by cuttings of one or two years' growth, planted in a shady border, at the beginning of April, or the end of August. No tree bears transplanting, when old, better than the yew; so that hedges of a considerable height may be formed of it where it is desirable to shut out walks, or hide objects in the shrubbery.

Halifax, in Yorkshire, owes both its name and importance to this tree, if we may credit story related by Camden, who tells us, that

it was formerly a despicable village called Hauton; but that the numerous pilgrimages made to that place, and the great and rich oblations which the superstitious left behind them at the sacred yew-tree, caused the rise of this town. The story relates, that an amorous priest falling in love with a pretty maid, who refused his addresses, cut off her head; which being hung upon a yew-tree till it was rotten, the tree became so sacred, not only whilst the virgin's head hung on it, but as long as the tree itself lasted, that the people went in pilgrimage to it, plucking and bearing away branches of it, as a holy relic, whilst there remained any of the trunk, persuading themselves that the small fine veins and filaments resembling hairs, between the bark and the body of the tree, were the hairs of the virgin. The name of Halifax imports holy hair,

The timber of this tree is employed by the cabinet-makers and inlayers, and was formerly in great repute for the cogs of mills, axle-trees, and the bodies of lutes, theorboes, and other musical instruments. Mr. Roucher asserts, upon his own experience, that the wooden parts of a bedstead of yew will not be approached by bugs.

ADDENDA.

BUTCHER'S BROOM. — RUSCUS.

Natural order, Samentaceæ. Asparagi, Juss.

A genus of the Diæcia Syngenesia class.

“Where’er we gaze, above, around, below,
What various tints, what magic charms, are found!”
BYRON.

“—easie things, that may be got at will,
Most sorts of men doe set but little store.”
SPENCER.

THIS singular and beautiful evergreen shrub, that embellishes our native thickets, deserves a more frequent situation in ornamental shrubberies. It seldom exceeds three feet in height, and therefore is particularly calculated to clothe the foreground of these plantations, and to intermix with the mezerion; the lavender, and other diminutive shrubs, where the rich blue green of its stiff and sharp-pointed leaves at all times forms a happy contrast: and which are no less gay than curious.

during the winter months, when its bright scarlet fruit appears placed on the centre of the upper surface of the leaf, in a manner different from any other native plant we possess.

The flowers appear in March and April; they are of a diminutive size, and of a greenish white colour, forming a small star on the leaf when expanded. But, on close examination, the flowers will be found not to grow out of the leaf, but on a pedicle from the bosom of it, which is immersed beneath the outer coat, whence it may with ease be dissected.

The ancients considered this plant a species of myrtle, as its Greek name indicates, ὄξυμυρσίνη, meaning prickly myrtle; and Pliny tells us, that the Latin name in his time was *Chamæmysine* and *Oxymysine*. In French it is named *Houx Frelon*, and *Petit Houx*, little holly; and in English it is frequently called Kneeholm, Kneeholly, and Kneehulver. The name of Butcher's Broom was given to it from the custom of binding it into besoms for sweeping butchers' blocks, and defending their meat from flies.

M. Jussieu ranges it in the family *Asparagi*; and the young shoots, which spear out of the ground in a similar manner, were formerly gathered and eaten like asparagus.

Gerard tells us, that it formerly grew upon Hampstead-heath, and it may still be found in many places in the southern and midland counties of this country ; but it will not thrive in northern countries, nor will it bear the winter of Sweden.

It is also a native of Asia and Africa, and was in ancient times greatly esteemed for its medicinal qualities, the root being recommended as an aperient and diuretic in dropsies, urinary obstructions, and nephritic cases.

Dioscorides highly extols its deobstruent and diuretic powers. Riverius relates a case of dropsy successfully treated by a decoction of the roots. Bauchin and several other writers give strong cases of its effects in dropsy ; but it is in the early stage of dropsy that this medicine is of the most value.

Etmuller strongly commends this plant as a valuable remedy in scrophulous tumors and ulcers ; he recommends a drachm of the powdered root to be taken every morning. It is but little used in modern practice ; but may perhaps be again restored to its former celebrity, when some other simples are discarded from the *Matèria Medica*.

GUM CISTUS.—CISTUS LADANIFERUS.

*Natural order, Rosaceæ. Cisti, Juss. A genus
of the Polyandria Monogynia class.*

——— “ Ye lovely fugitives !

Coeval race with man ! for man you smile ;

Why not smile at him too : you share indeed

His sudden pass ; but not his constant pain.”

YOUNG.

THE beautiful family of plants comprised under the tribe of Cistus are sufficient to form a separate and interesting work.

The transient nature of their blossoms extend through their numerous race, from the most minute that creeps the rock, to the tallest shrub that heads their family. None can be found to possess a flower which lives to see a second sun. But as they have a great profusion of flower-buds, this imperfection is the less regretted ; and we find them emblematical of popular favour, smiling on this spray to-day, on that to-morrow, ever changing, ever gay, but no sooner received than withered. But,

——— “ ye painted populace !

Who dwell in fields, and lead ambrosial lives

In morn and evening dew your beauties bathe,

And drink the sun, which gives you cheeks to glow ;”

you feel none of the pangs that pain the disappointed man, who survives you to endure the noxious vapour and the blast of winter.

The gum cistus is scarcely surpassed by any of the vegetable ornaments of the shrubbery, as its flowers are both conspicuous and beautiful, from the month of June to the end of August, being of the size of a middling single rose. The petals are of a clear white, with a fine purple spot at their base, and crumpled like the petals of the poppy. The shrub grows to the height of from four to six feet, and spreads to a considerable extent; the foliage is of a dingy green on the upper surface, and whitish on the under side, and remains on the branches all the winter. The whole plant exudes a sweet glutinous substance in warm weather, which has a very strong balsamic scent, and perfumes the air to a great distance. Mr. Swinburn remarks, that the cistus, which grows in great abundance in the waste lands of Sicily, exhaled so powerful an effluvium, when the sun had been risen some time, that it quite overcame him. Fable informs us, that the Greeks named this plant *Κιστος*, from a youth named Cistus; but naturalists suppose it to have been so called, because the seed is inclosed in a *cista*, or capsule :

The Latins adopted the same name, which has been followed by all the European languages.

In English, it is frequently called the Rock Rose, because it grows naturally in rocky soil and situations. The trivial name of *Ladaniferus* is added to this species of cistus, because in warm climates it produces a gum or drug called Ladanum; which is a medicine of great antiquity, and considerable utility in pharmacy.

Dioscorides relates, that ladanum was formerly collected by means of goats, which, browsing on these shrubs, returned to their sheds with their beards loaded with a glutinous substance collected from the leaves of the cistus, which the peasants combed off, and formed into little lumps.

Tournefort tells us, that the common way of gathering the ladanum, when he was in the Levant, was by brushing it off the leaves with a sort of whip, composed of many lashes, or straps, to which it adhered, and from these it was taken off with knives, and formed into little cakes. Bellonius also notices, that it is collected by slightly brushing the shrub, in the heat of summer, with a kind of rake, having several straps or thongs of leather fixed to it, instead of teeth.

There are two sorts of ladanum in the shops. The best, which is very rare, is in dark-coloured masses, of the consistency of a soft plaster, which becomes still softer on being handled. The other is in long fells, coiled up, and much harder than the preceding, and not so dark. The first has commonly a small, and the last a very large admixture of fine sand, blown upon the juice from the sandy soil where it is found. The best ladanum is brought from Candia and other places in the Archipelago; where the perfume of this drug is so greatly esteemed, that both the Greek and Turkish ladies carry little balls of it to smell to: the fume of it is said to comfort the brain. Outwardly applied, it strengthens the stomach, and stays vomiting; and it is said to be an excellent balsamic in dysenteries and hoarseness.

Dale says, it mollifies, digests, maturates, and attenuates; and that, externally applied, it softens, and is anodyne, and good for the toothache, heartburn, pains of the stomach, and hysteric fits. The chief use of ladanum in modern practice is in fuming, its fragrant smell having made it a constant ingredient in such preparations. Sometimes it is used in troches; and in the Paris Pharmacopœia, there is a pectoral troche in which there is a

good quantity of ladanum, with musk and amber. The ancients steeped the flowers of the cistus in their wines that had become tart, to correct the effects of their acidity; and this resinous union, nauseous as it may appear to us, is still liked by the natives throughout the Peloponnesus, who continue to mix resin to correct the newness of their wine, and render it fit for immediate consumption.

The dedication of the cone of the pine-tree to Bacchus is traced by Chateaubriand, with some plausibility, to this custom.

At what period the gum cistus was first cultivated in England is uncertain. In 1568, Turner says, "I haue sene it in Italy in certaine gardines, and ones in Englande, in my lordes gardine at Sion."

It grows spontaneously on the hills in Spain and Portugal; but they do not collect the ladanum in these countries.

The gum cistus flourishes best in a sheltered and warm situation, and thrives well on the sea coast, when not too much exposed to the cutting winds. It is propagated by seeds, and also from cuttings.

ADDENDA TO THE LARCH;

FROM THE OBSERVATIONS AND EXPERIMENTS OF HIS
GRACE THE DUKE OF ATHOL.

THE introduction of this most valuable tree into Scotland, at least into the county of Perth, took place in the year 1738; when a highland gentleman (Mr. Menzies, of Glenlyon, Perthshire), brought a few small plants from London his servant carrying them on horseback on the top of his portmanteau.

Some of these plants, says his Grace, he left at Monzie, near Crieff, some at Dunkeld, and the remainder he carried home; where some have been cut, within these few years, of a great size. The four left at Monzie are in full vigour; the largest, nearly twelve feet in circumference, at three feet and a half above the ground. Those left at Dunkeld are also in full vigour. Some were placed in a greenhouse, but not thriving, were turned out; one of which is about twelve feet in girth, at three feet and a half above the ground, and is computed to contain four loads of solid timber, or two hundred feet. The largest measured, in 1819, eighty-nine feet in height. At one foot

from the ground, it girthed seventeen feet eight inches; at three feet, twelve feet seven inches; at ten feet, ten feet four inches; at twenty feet, nine feet seven inches; at forty feet, seven feet eleven inches; at sixty feet, four feet eight inches; at seventy feet, three feet two inches. It contained three hundred feet, or six loads of timber.

Some years elapsed after these trees were planted before any more larches were set at Dunkeld. A few, however, were planted at Blair in that interval. But the larches planted between the years 1740 and 1750 were inconsiderable in point of number; for the planting of the rocky mountains round Dunkeld, with a view to their growing wood, which has since been done, would at that time have been treated as a chimerical idea.

The Duke of Athol has now been in the habit of cutting larch timber, for different purposes, for thirty years; and as yet, he says, he has met with no instance to induce him to depart from the opinion,—that larch is the most valuable acquisition, in point of useful timber, that has ever been introduced into Scotland; and he states, that he has cut and used larch, from fifty to sixty years' growth, and that the small larch which were thinned out of plantations, were used for

upright paling, rails, and hurdles. Those fit for sawing, were sawn through the middle; the smaller used round, with the bark on, and proved more durable than oak copse-wood of twenty-four years' growth.

Boats built of the larger timber have been found sound, when the ribs, made of oak forty years old, were decayed; and we find that the Duke has for some years past had all his ferry and fishing-boats built of larch.

In mill-work, and especially in mill-axes (where oak only used formerly to be employed), larch has been substituted with the best effect. In cutting up an old decayed mill-wheel, in 1818, those parts of the water-cogs, &c., which had been repaired with larch about twenty years before, though black on the surface, on the hatchet being applied, were found as sound and fresh as when put up.

There is not a sufficient quantity of larch, of fit growth, to bring that wood into general use for common purposes; but such as has been cut and sold, has brought two shillings per foot; in some instances more. In the year 1812, the Duke of Athol sold a larch-tree, of fifty years' growth, for twelve guineas; and at the same time he was offered twenty pounds for another, which he declined cutting. In 1818, he cut twenty larch-trees from a clump

where they stood too thick, but left the finest trees standing; for these twenty trees his Grace received one hundred guineas, being at the rate of two shillings per foot. The largest of the twenty trees measured one hundred and five feet in length, five feet eleven inches in girth, at four feet from the ground, and contained ninety-four square feet of timber. One of the trees measured one hundred and nine feet in length; but being drawn up by standing too close, did not contain so much solid wood as the first.

The lower range of the Grampian Hills, which extend to Dunkeld, are in altitude from one thousand to one thousand seven hundred feet above the level of the sea; and a range of mountains, one thousand two hundred feet above the level of the sea, is now planted with larch. They are in general barren and rocky, composed of mountain schist, slate, and ironstone. Up to the height of twelve hundred feet, larches are planted, and grow luxuriantly; where the Scotch fir, formerly considered the hardiest tree of the north, cannot rear its head. In considerable tracts where fragments of shivered rocks are strewn so thick that vegetation scarcely meets the eye, the larch puts out as strong and vigorous shoots as are to be found in the valleys below, or in the most sheltered situations.

The Duke of Atholl had planted about a thousand Scotch acres on similar mountains, in 1819, and which has been continued since, placing Scotch fir only in the wet grounds, where larch will not grow, and mixing spruce on the highest points, finding from experience that that tree is next in value to the larch, and thrives in alpine situations almost equally well.

We are informed by his Grace, that of all the larch he has had cut, he has never met with one instance of decay. But that he has seen larch cut in wet situations and tilly soil, on low moors, which, at forty years of age, were decaying at the heart. The larch is certainly an alpine tree, and does not thrive in wet situations.

The comparative value of larch and Scotch fir is such, that when the Duke of Atholl sold a larch of fifty years' growth for twelve guineas, a fir of the same age, and in the same soil, brought only fifteen shillings.

The larch, from being a deciduous tree, is never broken by snow, and very seldom torn by the winds; whilst a heavy fall of snow will destroy, in one night, and break down sometimes more than a third of a fir plantation.

Results of the Experiments made on the Surveys of Larch Timber, conducted by the Duke of Atholl, in Scotland, compared with Riga Fir Timber, and proceeding from the Estate of his Grace the Duke of Atholl, in Scotland, compared with Riga Fir Timber, and American White Pine

Date of Experiments.	Description of the Timber.	Dimensions of the Batts.		Weight of the Batts at the time of Experiment.	Distance of the Fulcrum from the ends of the Batts, which the weights were affixed.		Curvature received by the Batts under the pressure of		Curvature remaining after the removal of the weight.	Weight under which	
		Length.	Width.		ft.	in.	Half hundred weight.	One hundred weight.		The fibres upset or crumpled.	The Batts broke.
1812. 3d June.	Larch { Outside Heart } { Outside Heart }	6	0 2 by 2	5 8	5	0	7 1/2	16 1/2	inches.	cut. grs. lbs. oz.	cut. grs. lbs. oz.
	Riga, dry	6	0 2 x 2	5 10	5	0	9 1/2	7 1/2	1 0 14 0	1 2 2	1 2 2
	American White Pine, wet	6	0 2 x 2	5 5	5	0	5 1/2	10 1/2	1 0 14 0	1 0 14 0	1 0 14 0
	American White Pine, wet	6	0 2 x 2	5 8	5	0	3 1/2	6 1/2	1 1 20 0	1 1 20 0	1 1 20 0
1812. 3d June.	Riga, dry	6	0 2 x 2	7 6	5	0	3 1/2	10 1/2	1 0 7 0	1 0 7 0	1 0 7 0
	American White Pine, wet	6	0 2 x 2	5 7	5	0	3 1/2	10 1/2	1 0 7 0	1 0 7 0	1 0 10 0

The average and relative strength of the three species will therefore stand as under; viz.

	Average Strength.		Relative Strength.	
Larch.....	cut.	grs. lbs.	.....	1,000
Riga, dry	1	1 8	.....	,804
American White Pine, wet ...	1	0 7	.....	,824
American White Pine, wet ...	1	0 10	.....

The above experiments were tried in the presence of Captain Bayntun, R. N., and the first was also witnessed by his Grace the Duke of Atholl, Commissioners Peake and Thomson, George Yeats, Esq. &c. &c.

J. LE BARRALLIER.
JOHN PEAKE.

Results of Experiments, on the transverse Strength of Timber, made at Mr. Atkinson's, Grove End, St. John's Wood, on Thursday, March 12th, 1818.

The pieces were each an inch square, except No. 3., which was only 8-10ths of an inch in breadth. The numbers in the Table show the weights it would have borne if it had been an inch square; the pieces were supported at each end, and were loaded by putting 5 lbs. at a time into a scale suspended from the middle; — the distance between the supports 30 inches.

Description of Timber.	No. 1. <i>Memel Timber.</i>	No. 2. <i>Red Larch.</i>	No. 3. <i>Red Larch, old and very dry.</i>	No. 4. <i>English Oak.</i>	No. 5. <i>English Oak.</i>	No. 6. <i>Riga Timber.</i>
Compar. stiffness — or the weight that bent each piece half an inch	145 lbs.	80 lbs.	93 lbs.	60 lbs.	65 lbs.	125 lbs.
Compar. strength — or the weight that broke each piece	212 lbs.	253 lbs.	295 lbs.	222 lbs.	231 lbs.	212 lbs.
Compar. extensibility — or the space through which the middle had bent at the time of fracture	2.25 inch.	3 inches.	2.75 inch.	2.5 inches	1.4 inch.	2.8 inch.
Weight of a cubic foot of each kind of timber in the nearest whole number	34 lbs.	40 lbs.	31 lbs.	41 lbs.	46 lbs.	30 lbs.
Remarks.	Broke short.	Splintered.	Broke short.	Broke short.	Splintered	Broke short.

As the strength of small pieces depends much on the position of the annual rings, the pieces were placed as nearly alike in this respect as possible. When the pieces were in the position in which they were broke, the dark lines or portions of the annual rings that appear in the section of a piece were vertical. — From the results exhibited in the preceding Table, it appears very clearly, that *Larch* is best adapted to resist the force of a body in motion; — but to leave no doubts in this respect the following experiments were made:

Experiments on the Resilience of Timber.

The pieces were each an inch in depth, and laid upon supports thirty inches apart. The weight fell between two vertical guides (similar to a pile engine), upon the middle of the piece.

No. of Exper.	Description of Timber.	Breadth of the Piece.	Weight.	Height from which the Weight fell.	Effects.
No. 7.	Oak, same kind as No. 4. }	1 inch.	7 lbs.	48 inches.	Broke.
No. 8.	Larch, same kind as No. 2. }	1 inch.	7 lbs.	48 do.	No effect.
	The same	.....	.....	54 do.	No effect.
	The same	.....	.....	60 do.	Set to a slight curve.
	The same	.....	.....	66 do.	A little more curved.
	The same	.....	.....	72 do.	{ Curved about an inch.
	The same, convex side upwards }	.....	.....	72 do.	{ Curved the contrary way.
	The same	.....	14 lbs.	42 do.	Broke.
No. 9.	Larch, same kind as No. 3. }	0.8 inch.	7 lbs.	48 do.	No effect.
	The same	.....	.....	54 do.	Broke.
No. 10.	Oak, same kind as No. 5. }	1 inch.	7 lbs.	48 do.	No effect.
	The same	.....	.....	54 do.	Broke.
No. 11.	English Oak	1 inch.	7 lbs.	54 do.	No effect.
	The same	.....	.....	60 do.	Broke.

No. 11 was a dark-coloured and apparently very strong piece of wood; specific gravity 0.872 or 54½ lbs. per cubic foot. * On the whole, then, it appears, that *Larch* is superior to oak in stiffness, in strength, and in the power of resisting a body in motion (called resilience): and it is inferior to Memel or Riga timber in stiffness only.

I am, Sir, yours, &c.

THOMAS TREDGOLD.

Grove End, March 16, 1818.

* These experiments were made in the presence of His Grace the Duke of Atholl, Lord Prudhoe, Lord James Murray, John Deas Thomson, Esq., William Adair, Esq., Mr. Geo. Bullock, and Mr. Atkinson, architect to the Ordnance.

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